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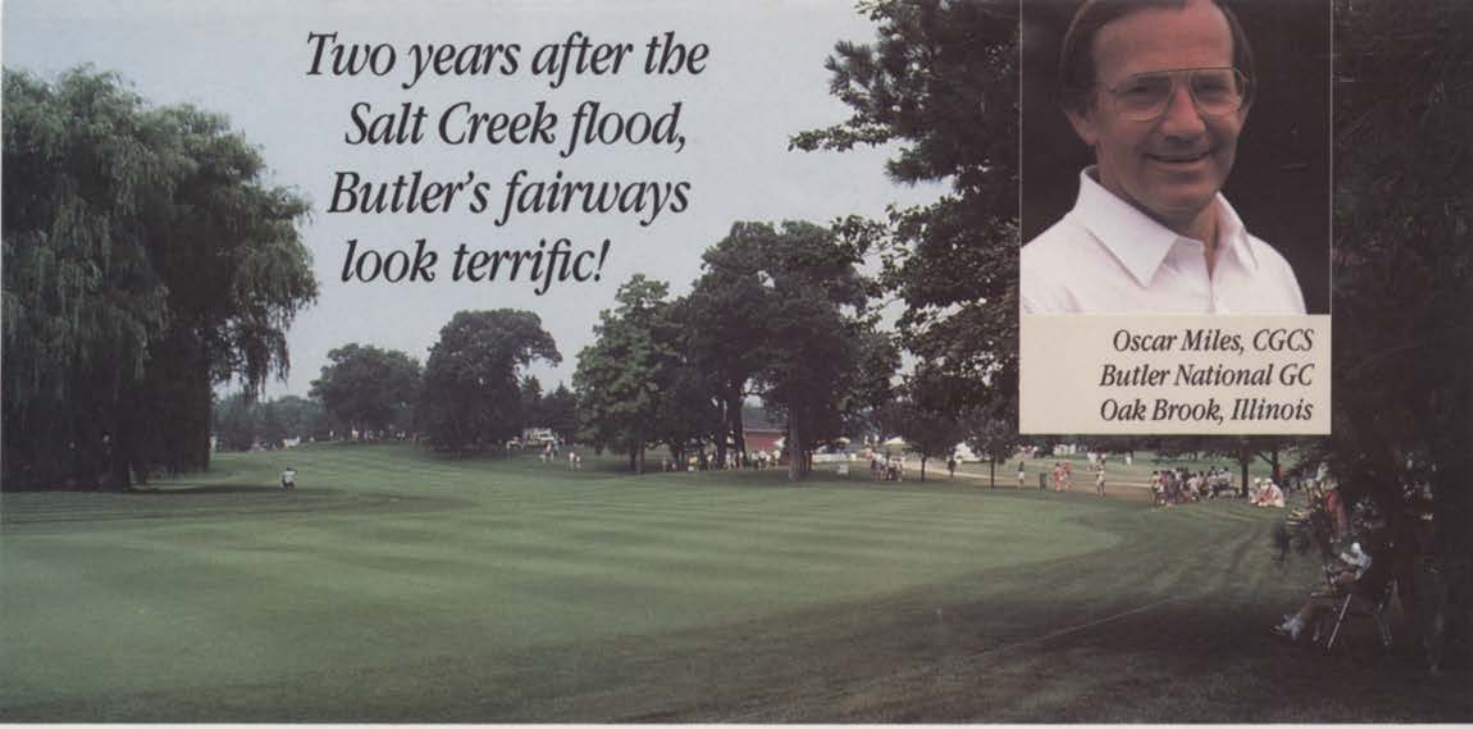

Oscar Miles, CGCS
Butler National GC
Oak Brook, Illinois

Seventh fairway during the Western Open, 1989.

Penneagle and Oscar Miles make Butler National GC 'picture perfect' again!

"Before the 1987 Western Open, Butler National was primped and trimmed to perfection for its date with the pros and television cameras" says Oscar Miles, "then 9½ inches of rain drenched the course. The resulting flood deposited tons of silt that dried and destroyed the grass beneath.

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After two years, Penneagle produces a good working layer with no thatch buildup.

"In preparing for the 1989 Western Open, we compared the course to a Van Gogh painting, and the crew's efforts were to enhance the work of art by meticulous touchup on the frame. The result was a 'picture perfect' course that caused the players and announcers to rave.

"Now if I could only get the announcers and writers to call 'Penneagle' by name ... you can't plant *just any* bentgrass and expect it to perform like Penneagle."

Seventh fairway before the rain delayed 1987 Western Open.

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OCTOBER 1989, VOLUME 30, NUMBER 10

LANDSCAPE MANAGEMENT

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LANDSCAPE Guide MANAGEMENT

CHEMICAL POCKET GUIDE

Look for a special, pocket-sized supplement in this issue for those of you who are planning on a complete chemical program for your lawn areas next spring. Compiled from our popular "Guide to Landscape Management" series, this is a keeper for months to come.

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BPA ABP EDGELL COMMUNICATIONS

JOHN DEERE

How to survive in the desert on only 5 reels a day

The desert is a pretty forbidding place for golf. But thanks to irrigation and the work of knowledgeable superintendents like Robert Stuczynski the desert area around Palm Springs, California, has become one of the country's golf meccas.

Stuczynski supervises maintenance at the 36-hole Ironwood Country Club in Palm Desert, California. And, for the last seven months, he's been using a 5-reel John Deere 3325 Professional Turf Mower on all 36 of his fairways.

"Equipment has to be tough to survive out here," says Stuczynski. "The temperatures, the terrain, the rocks—they're all hard on it.

"Our 3325 works 10 hours a day, seven days a week mowing all our fairways. We've had it for about seven months now and it's held up very well. The quality of cut has been excellent. In fact, it's doing such a good job we'd like to get another one.

"I went out and talked to other people who already owned John Deere equipment before I bought my 3325. People who make their living with equipment just like I do. I heard a lot of good things about equipment quality, durability and parts support. And, after the test we've given it here, the 3325 has certainly lived up to that reputation."

Talk to your John Deere distributor today for information on all we have to offer. Or write John Deere, Dept. 956, Moline, IL 61265 for free literature. We know, like Robert Stuczynski, you're going to like what you see.

This John Deere 3325 Turf Mower mows all 36 fairways every day at Ironwood Country Club in Palm Desert, California.

JOHN DEERE

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SAFETY live with it

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AS I SEE IT...

On keeping your business up to date

Once upon a time, it was good enough to keep up with the Joneses. As long as one yard looked as good as the next, the owners were pleased.

But that's not the case in this competitive world today. Homeowners now want more.

The same holds true with your lawn or landscape business, with your campus or athletic field. And, beginning with this issue, LANDSCAPE MANAGEMENT hopes to provide you with information designed to keep you *ahead* of your competitors, no matter who they are.

By now, you've seen the "Toward 2000" banner on our cover. Get used to it; it'll be there quite a few times in the coming years. Its purpose is to alert you to an article that could provide you with the competitive edge to prosper in this dynamic industry.

As we head into the 1990s, new chemicals, innovative equipment and unheard-of business techniques will take the forefront—and readers of LANDSCAPE MANAGEMENT will be the first to hear about them, on our pages.

Over the years, LM's reputation as being first with the-news-that-counts has grown among readers. According to readership studies, when you want to know what's going on in the green industry, you come to us. With this new series—the first and only one of its kind among industry trade publications—we are hoping you continue to "open us first."

We're starting the "Toward 2000" series off with a bang. In this issue, you can read about the impending personnel crunch facing the landscape and other labor-intensive industries in the next few years.

We'll attack other current topics in the months ahead, ranging from water conservation techniques to the threat of government legislation. Along with alerting you to problems your business might encounter, we hope to offer possible solutions. In short, we'll continue doing what we've done best in the past.

Staff members—managing editor Will Perry, associate editor Terry McIver and myself—begin this project with unbridled enthusiasm. We hope you enjoy reading LM in the coming months as much as we look forward to writing it. And we also hope that, when called upon by us, you can help find solutions to the problems that the industry will face in the coming decade, and on...Toward 2000.

Jerry Roche

Jerry Roche, executive editor

LM

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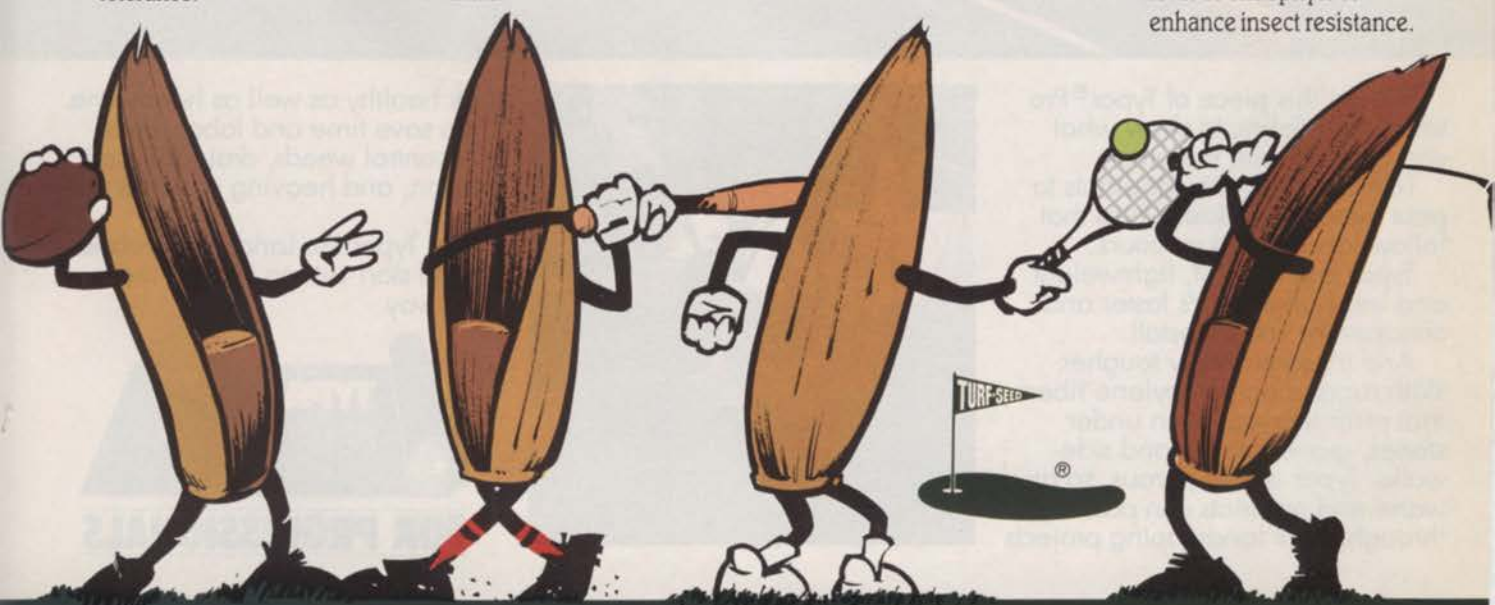

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GREEN INDUSTRY NEWS

OCTOBER 1989, VOLUME 30, NUMBER 10

LANDSCAPE MANAGEMENT

ASSOCIATIONS

Research a key to keeping the green industry green

NATIONAL REPORT — Major organizations within the green industry are realizing how important research money has become.

On one hand, the Golf Course Superintendents Association of America (GCSAA) recently contributed $25,000 to the USGA/GCSAA Turfgrass Research Committee. On the other hand, the American Society of Nurserymen (AAN) has told the House and Senate Appropriations Committee that more money must be made available for agricultural research programs.

The GCSAA's money will support ongoing scientific work on new turfgrass varieties that would require less water and be more disease resistant.

GCSAA President Dennis D. Lyon made this observation at the annual USGA/Golf Writers Association of America banquet held during the U.S. Open in Rochester, N.Y.

William H. Bengeyfield, national director of the USGA Green Section, noted that more than $2.8 million has been distributed by the committee since 1983. "We thank GCSAA for the research funding they provide, and we appreciate the time people like (GCSAA vice president) Jerry Faubel, Lyon and (executive director) John Schilling contribute to the committee."

"GCSAA sincerely supports the USGA turfgrass research project," said Lyon. "We look forward to working together with the USGA on other projects in the future."

Chinese interns look over seed samples at Jacklin Seed in Post Falls, Ida., where research is a continuing project.

AAN representatives, appearing in Washington, D.C. recently, cited a report by the U.S. Department of Agriculture and Economic Research Service. The report estimated 1987 grower cash receipts from environmental horticulture crops at $4.3 billion.

"Due in part to this continuing rate of growth," said Duane Jelinek, AAN director of horticultural research, "tremendous potential exists for increased job opportunities as well as positive impacts on the environment."

However, the AAN said it is aware of federal deficit woes, and insisted it doesn't want a handout.

"We have restricted our recommendation to maintaining the integrity of research programs which are absolutely vital to the nursery industry," said Ben Bolusky, AAN's director of government affairs.

Of greatest concern to the association is continued funding for its plant science research programs, the cooperative state research service and extension services. □

GOLF

Designers should respect nature, Dye says

CHICAGO — Today's golf course designers face many new challenges, thanks to heightened concerns about environmental preservation, says Pete Dye, president of the American Society of Golf Course Architects (ASGCA).

Dye says designers must comply more with standards relative to wetland preservation, use of freshwater supplies and the impact of pesticides on groundwater. And while he supports such standards, he believes the approval process can defer a project for years, and hold up the necessary permits until issues can be studied completely.

For that reason, Dye says ASGCA members are working to identify the problem areas and propose positive alternatives.

"The ASGCA Foundation, for instance, recently

continued on page 11

DESIGN *from page 8*

commissioned a study by Dr. Martin Petrovic of Cornell University on the effects of nitrates on groundwater." That report was to be available in May.

Dye believes more concrete data is required to support the idea that properly maintained facilities embellish, rather than destroy the environment.

"No issue has raised the level of consciousness higher than the subject of wetland and marshland boundaries," says Dye. "Thus, integrating wetlands into the framework of a Master Plan without jeopardizing the natural habitat or course playability has become a major challenge to golf course architects."

Dye says wetlands have become a high priority of regulatory agencies. That concern and subsequent public hearings have resulted in a slower permit procurement process.

"Wetlands have been reduced to less than 99 million acres from the 215 that existed in 17th century America," says Dye. "So it is imperative we protect a valuable natural resource." □

NEXT MONTH:

Bio-control of turf pests

TREES

Universal Studios gets a giant

ORLANDO, Fla. — An extraordinary project came Ed Yates's way recently: uproot, transport and replant a 38-foot Phoenix reclinata palm tree.

Yates's Lakeshore Tree Moving was contracted by Universal Studios to move the tree from an area nursery to the movie company's soon-to-be-completed Orlando lot. Developer Marshall Cohn had purchased the nursery land, and was looking for ways to clear it for a condominium complex.

Moving the 43-year-old tree 13 miles required a lot of planning. "We had some small problems, but we solved them as they came up," says Yates. "We started by going up into the tree with a sky reach to clean it. We then dug a 12-inch trench around the ball, and filled the trench with sawdust. We cut the ball in two halves with chain saws and cross-cut saws."

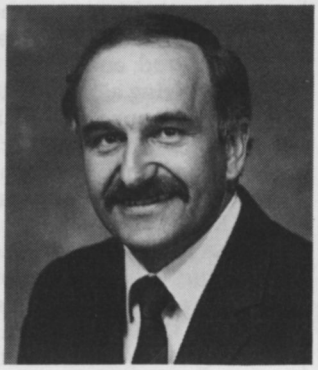
The police escort would not be available for two days, during which time the tree ball was insulated and received constant watering. Yates says replanting the two halves exactly as they had originally been took about two hours

Universal Studios/Florida opens in May, 1990. □

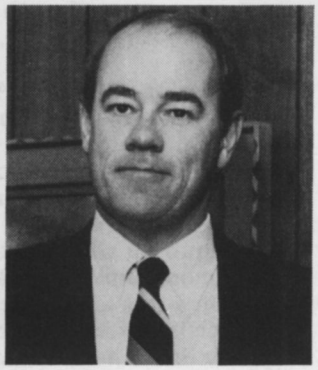
Workers support a lower trunk as one half of a 38-foot highpalm tree is positioned at Universal Studios in Florida.

INDUSTRY

Ransomes consummates Cushman buy; also purchases Salsco line of products



Adam: Cushman, Ryan and Brouwer will continue to be run independently.



Rafos: Partnership will enhance Ransomes' domestic and international markets.

JOHNSON CREEK, Wisc. — Landscape managers will still be able to purchase Cushman equipment from their usual distributors despite a major deal in which product lines changed hands last month.

Ransomes PLC added to its influence on the turf equipment market by first purchasing products previously marketed by Salsco Inc. Then, it purchased Cushman from OMC Lincoln for a reported $150 million.

The Cushman group includes Cushman turf vehicles and mowers, Ryan aerators and sod cutters, and Brouwer mowers, vacuums and sod harvesting equipment. The group will be run as an independent entity under the Ransomes America umbrella.

"Cushman will operate as before," says Helmut Adam, president of Ransomes America. "It is a well-run company with a good name. We are not going to change something

RANSOMES *from page 11*

Cushman."

Manufacturing and marketing of Cushman products will continue to operate out of Lincoln, Neb. Stuart Rafos, president of Cushman, says the sale aligns Cushman with a business partner that is close to its core business. Rafos also notes that Ransomes has the international marketing expertise and organization to substantially extend Cushman's growing international business and enhance its postion in the domestic market.

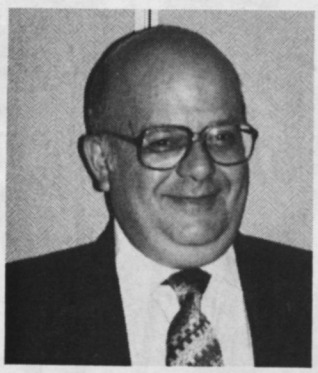
Rafos believes Cushman's annual sales of $100 million will double in the near future. The company is already making plans for increased production facilities.

Under the agreement, Cushman's management team and dealer network in the U.S. and Canada will retain the status quo.

It's not the same with Ransomes' "Turf Renovation" line of equipment, purchased from Salsco Inc. for a reported $2 million.

Those products—which include walk-behind, tow and riding core aerators; a slicer/seeder; a walk-behind dethatcher; self-propelled drop spreaders; tailgate and towed truck loaders and a walk-behind leaf blower—will now be marketed through Ransomes dealers.

Despite the sale, Salsco plans to remain in the turf field. President Sal Rizzo says the company will introduce new products at the upcoming PLCAA show next month. □



Bob Felix: dissatisfied with OSHA's Vertical Standard

TREES

NAA is set to battle OSHA's regulation in Washington soon

Members urged to support NAA

AMHERST, N.H. — The National Arborist Association is preparing to meet with representatives of the Occupational Safety and Health Administration in Washington next month to challenge OSHA's proposed Vertical Standard regulation.

The NAA will give testimony at public hearings in Washington on Nov. 28 and in California Dec. 12.

By late August, more than 75 firms had expressed dissatisfaction to the regulation with OSHA, according to NAA executive vice president Bob Felix.

The regulation, OSHA Proposed Sec. 1910.269 Electric Power Generation, Transmission and Distribution Standard, "is a very important matter for the entire tree care industry," says Felix.

According to the NAA, undesirable aspects of the regulation include:

- barring line clearance tree contractors from performing storm work;
- requiring all crews of two or more employees that work on a tree any branch of which is within 10 feet of a power line to have at least two crew members trained in CPR;
- allowing only a line clearance tree trimmer to do work on a tree that has a branch within 10 feet of a conductor;
- requiring all tree trimmers working trees proximate to overhead conductors to be tied into the tree once they reached four feet above ground; and
- requiring a chipper to be treated as energized if "it is possible" that the truck boom can be brought within 10 feet of an overhead line.

NAA members are urged to support the organization in its upcoming efforts. Write to the NAA at The Meeting Place Mall, Route 101, P.O. Box 1094, Amherst, NH 03031-1094; (603) 673-3311. □

TURFGRASS

Pre-grown grass to enter the U.S.

ESSONE, France — A new pre-grown grass said to be weed- and disease-resistant is being marketed in the U.S. by France's Darbonne Corp.

According to press reports, Minute Grass is more flexible and durable than sod grown in soil, and is said to remain green yearround.

Minute Grass uses a technology that involves mixing a customer's choice of grass seed with bark containing natural resins. The mix is then spread mechanically over a perforated micro-plastic film. Because Minute Grass is grown densely above the surface, it is impervious to weed and other impurities, according to Darbonne Corp. Minute Grass can be grown on tile, concrete, sloped hillsides, balconies and patios. Darbone reports that it is three times lighter than sod, three times more prolific in growing season and can be stored under 29°F refrigeration for up to six months.

For more information on Minute Grass, contact Darbonne Corp. at: 6, BD. Joffry, Milly La Foret, Essone, France 91490. □

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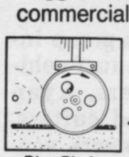

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Right Angle Blade for golf course sand traps, and flower beds. ▶

Right Angle Blade

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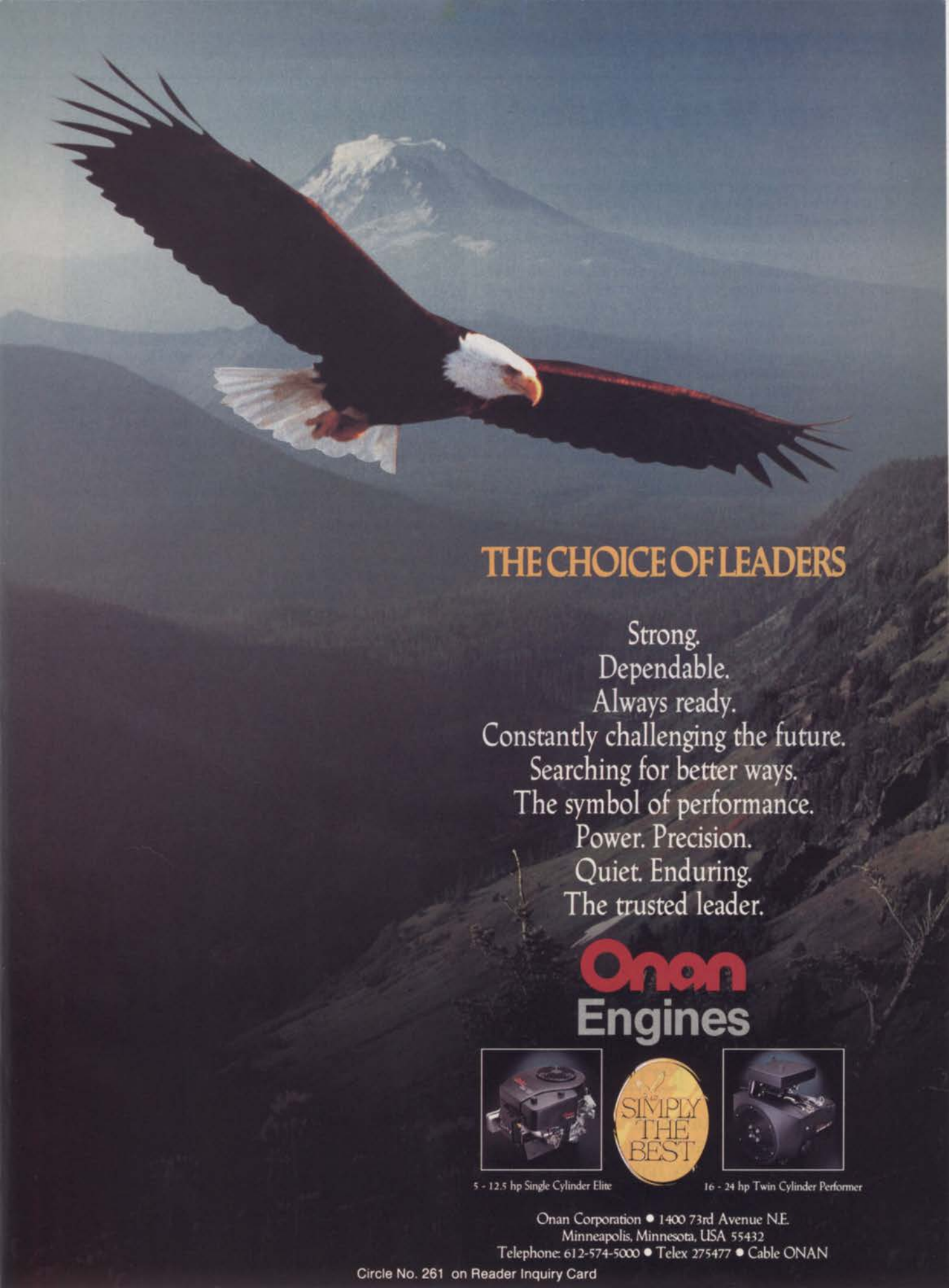
SHORT CUTS

THOSE DARN LAWYERS...may be standing in the way of research to determine athletic field hardness, says **Dr. Bob Carrow** of the University of Georgia. Carrow told attendees at the Sixth International Turfgrass Research Conference that research is stalled because no one wants to stick their necks out by saying a field is safe, then be called into court as an "expert witness" if and when an athlete is injured.

LOOKING FOR ALTERNATIVES...in available grass species was the goal of a recent study at Ohio State University. The North Central Regional Turfgrass Research Group—led by **Jill Taylor, Jim Simmons** and **Karl Danneberger**—initiated a study and evaluated the use of alternative grass species for use in the Midwest. The group believes some of the species would do well in low maintenance areas. Sixteen species were evaluated on a scale of 1 to 9, with 9 being the best score. Best color (all readings are at a height of 2 inches) was recorded by Alta tall fescue, 6.8. Highest density grass was Colt rough bluegrass, 7.5; best in the quality category was again Alta tall fescue, 6.3. Alta recorded the best total score at the two-inch height, with 19.4 out of a total 27 points.

MORE RESEARCH... Other recent OSU experiments included an attempt at tall fescue control in Kentucky bluegrass turf beyond the usual spot treatments. **Drs. John Street, Bill Pound** and **Jim Simmons** applied two formulations of Lesco TFC to an established tall fescue stand on April 25 and June 1. Applications of 2 oz. and 4 oz. of active ingredient were made to an estabished Kentucky bluegrass cultivar on May 1. In general, the the 2 oz. rate provided 90 percent control, and the 2 oz. + 2 oz. and 4 oz. rates provide control at 95 percent. There was no difference in percent control between the two TFC formulations. Kill of tall fescue required six to eight weeks. Discoloration of tall fescue began 10 days after treatment.

TURF FOR PEACE..."Today, the more civilized and peaceful a country is, the more [formal] turf is used," says **Dr. Fumio Kitamura**, organizing committee chairman of the Sixth International Turfgrass Research Conference. He adds, "When our lives become more comfortable, the importance of grass increases as a place where we can get close to it, enjoy it, play and relax on it. Turf is now a symbol of civilization, peace and affluence."



Circle No. 261 on Reader Inquiry Card

A real 'Easy Rider'

MILWAUKEE — Bill Smithyman, landscape operations supervisor for the City of Milwaukee (Wisc.), is the original "Easy Rider." He spends more time touring the streets than Peter Fonda and Dennis Hopper did in the 1969 motion picture.

Milwaukee, you see, has more than 119 miles of highway medians, most about 20 yards wide, 95 percent of which are irrigated. That's more than 450 acres, and it's Smithyman's responsibility to keep all those shrubs, trees and grass plants green.

He assigns one person to every two miles of boulevard. That person is in charge of weeding, edging, cultivating, picking up debris and manually turning irrigation on and off. Thirteen mowing crews of two to three persons each supplement the one-person maintenance crews.

"Milwaukee's had this system for eons," the veteran landscaper explains.

In 1988, Smithyman's 160 summer employees planted 424 trees, 6,375 shrubs and evergreens, more than 180,000 annuals and almost 6,000 perennials and bulbs.

"If you look at a landscape and you just have turf that is well maintained, it looks great," Smithyman philosophizes. "But trees are a major-profile plant material. They are also the easiest and least costly to add. Then, too, shrubs are another element in your profile."

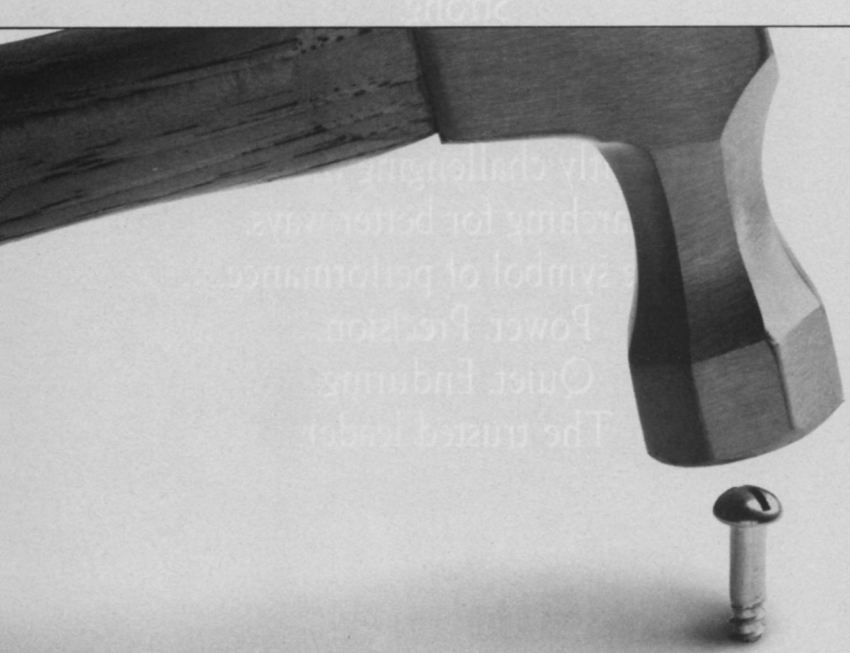
Smithyman has found that pinching a penny here and there pays off with the city administration when a special project is requested.

Milwaukee's Bill Smithyman at a flowerful boulevard.

"We have been very fortunate," he notes. "That's not to say there aren't programs that couldn't use more money. But we operate on a first-class basis and it's paid off when it comes to bottom-of-the-line budget. I believe it's a result of our professionalism."

Plenty of chances to save money exist within the confines of the government structure. For instance, a shredder was borrowed from Milwaukee County last year to shred leaves for composting. "We've got some pretty good stuff," Smithyman notes, saving the city money it would've spent on both debris disposal and buying mulch.

Fifteen miles of drainage slopes are mowed by the department's Hustler 602 mowers. Time and labor are



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charged back to the Sewer Department. More and more, Smithyman's crews help with snow removal in the winter. The boulevards are watered three times a week with water from Lake Superior; water bills are based on acreage.

Most importantly, training and incentives are a big part of keeping valuable employees.

"Bob Skiera, our city forester since the early 1970s, has a philosophy of bringing in the best people at all levels," Smithyman relates. "That gets back to professionalism."

Smithyman's smile reeks of pride. And justifiably so, judging by the work his department does.

"We want to enhance the quality of life in the city of Milwaukee. We feel that we're meeting that goal; it's a good place to live.

—Jerry Roche□

Forging a country club image

NORTH OLMSTED, Ohio — Bill Prest's current mission in life is a worthy one: to create a country club image while charging a public golf course price.

Prest is the superintendent of Springvale Country Club in this Cleveland suburb. He wants to give the club a distinctly professional look, regardless of the number of Sunday golfers who walk his fairways.

Part of the image upgrade has been accomplished by gradually adding sand traps. "There aren't many public courses with extensive sand," explains Prest. He is placing the traps in such a way that they don't slow down play. "There's nothing worse than a four-hour round of golf that turns into six hours," says Prest. "We've placed these fairway traps so that 90 percent of the play doesn't hit them. They're more cosmetic. At the same time, traps will be in play for lower handicapped golfers."

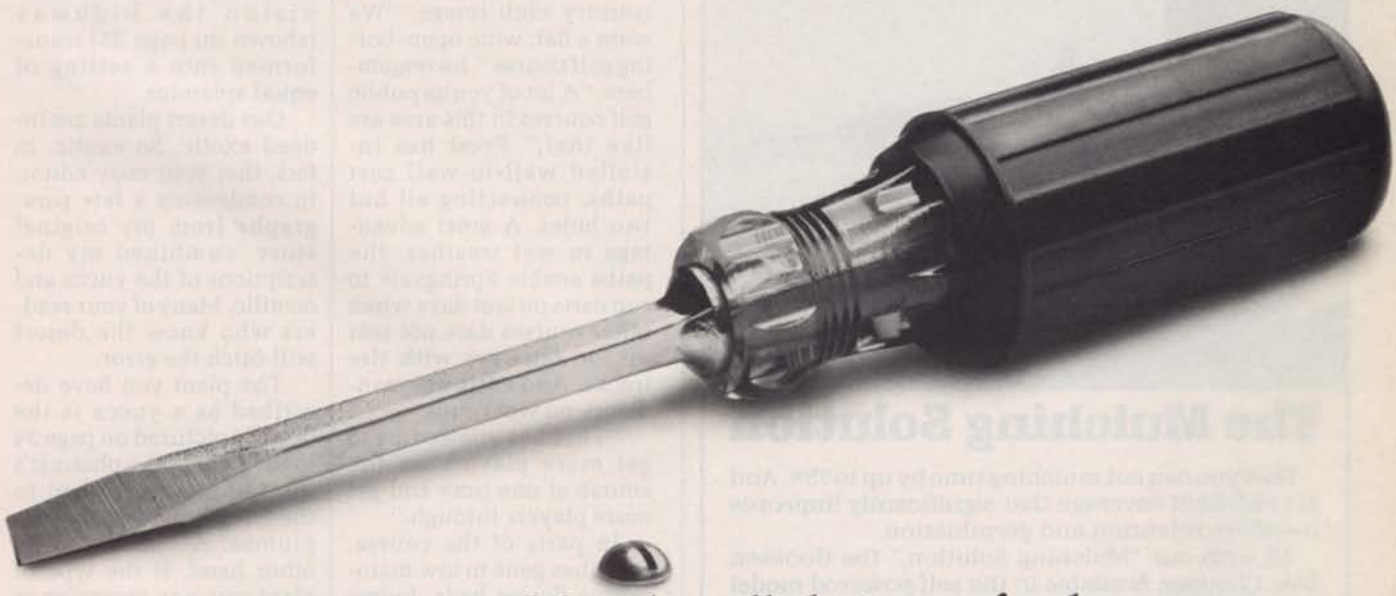
Prest: "more players through each day"

Prest installed nine traps this past summer, which will bring the course total to 40. The course had 18 when he became superintendent 23 years ago.

Prest has done more than just add sand to the course. He began an overall renovation program five years ago which included an aggressive schedule: "300 new trees, 15 traps and four or five new tees," says Prest. "We've also started renovating the irrigation system and have done some mound building." Dirt for the mounds came from a company working on a housing project next door to the club. The developer gladly supplied Springvale with 100,000 yards of topsoil rather than pay for hauling it away.

Prest, a graduate of the University of Massachusetts, says all renovations are in line with presenting a

continued on page 18



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Circle No. 112 on Reader Inquiry Card

LETTERS

Reader disputes architect's rule

To the editor:

In the July 1989 issue under your column "As I See It," you seem to draw the conclusion that the landsape architect is the project leader as it relates to landscaping and irrigation.

It is my experience in doing major landscape contracting that the landscape architect's roles are limited.

In theory, his work is completed (early on), unless he has a per diem contract with the builder.

I consider the contractor to be the key in completing a job in a fast, efficient and practical way to insure the builder's advertisement specials and certificates of occupancy.

We never install materials that are not specified by the builder. But to get hold of a landscape architect (since they consider us to be beneath them) is like getting hold of the president. Some architects set themselves up on a pedestal. Because they wear a suit and tie and sit in an air-conditioned office, they have no concept of the 32°F in the freezing rain or 95°F without the wind blowing.

I would suggest that architects do not take an active part in projects, and force contractors to make their decisions on the spot in order to satisfy their customers who are paying them. We are being paid by the customer and not by the architect; therein lies the key! If the landscape architect wanted to stop a project, the contractor would be blamed.

James H. Taylor
Taylor Made Landscaping
Farmingdale
New Jersey

Wildflowers work in shade

To the editor:

In the July "Problem Management," Dr. Rao was not correct when he agreed that wildflower seedlings or sod cannot survive in the filtered sunlight of a forest. He accepted the Montana reader's comment that "wildflowers won't work" without questioning the statement.

Wildflower germination in filtered sunlight will occur, assuring reasonable soil conditions and some level of moisture.

Columbine, ox-eye, coreopsis and corn poppy are among those which can survive in less-than-ideal (but not impossible) low level sunlight.

We can offer Dr. Rao a few jobs, some recent, where success on a scale of 1 to 10 has been a 6 or 7. This is not out of the range of acceptability, since turf (or ground cover), in many cases, does not reach this level under more ideal conditions than those described.

We, however, have always appreciated the good doctor's sensible and knowledgable comments in the past and always look forward to his management page.

Norm Krisburg
Agro Dynamics
Plainfield
New Jersey

Correcting desert plant references

To the editor:

Thank you for the beautiful two-page spread on the landscape project at Sun Valley, Ariz. in the June issue. The photo on page 34 really shows off the Sonoran Desert in all its beauty, and one can envision the highway (shown on page 35) transformed into a setting of equal splendor.

Our desert plants are indeed exotic. So exotic, in fact, that your copy editor, in condensing a few paragraphs from my original story, combined my descriptions of the yucca and ocotillo. Many of your readers who know the desert will catch the error.

The plant you have described as a yucca is the ocotillo pictured on page 34 to the right of the photo; it's the spiny upright plant in the foreground with orange plumes. A yucca, on the other hand, is the type of plant you may recognize as "Spanish bayonet," which is one of its commonly-distributed varieties.

Thank you for the opportunity to write for your magazine.

Joan C. Risley
Risley & Assoc.
Phoenix,
Arizona

PREST *from page 17*

country club image. "We were a flat, wide open, boring golf course," he remembers. "A lot of young public golf courses in this area are like that." Prest has installed wall-to-wall cart paths, connecting all but two holes. A great advantage in wet weather, the paths enable Springvale to run carts on wet days when other courses dare not tear up the fairways with tire tracks. And carts are mandatory on weekends.

"That has allowed us to get more players on the course at one time and get more players through."

In parts of the course, Prest has gone to low maintenace flower beds, longer grass reminiscent of the Scottish courses, and mulch. Low maintenance areas also serve to divide the course into playable and out-of-play areas.

He's even started a small tree farm in a low maintenance, out-of-play area.

How's that for initiative?

—*Terry McIver*□

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TOWARD 2000

IDEAS OF THE FUTURE AT WORK TODAY

WHITHER COMEST THE PEOPLE?

Look at workforce projections for the 1990s. What do you see? A lack of line-level employees, the green industry's bread-and-butter.

by Jerry Roche, executive editor

Rosabeth Moss Kanter of the Harvard University Business School has issued a stern warning to American business via *Business Month* magazine:

"Companies will have to figure out how to make work better. They will have to think of ways to give people careers they can be proud of."

This is the problem confronting the green industry as it heads into the 1990s. Why? Consider these facts, so boldly suggested by *Fortune* magazine:

- "The employment rate in the '90s will be lower than in the '70s and '80s.
- "As baby-boomers age, they will leave a demographic vacuum in their wake, confronting managers with a scarcity of entry-level job seekers.
- "Growth of the workforce will slow from 2.4% per year in the '80s to 1.2% in the '90s.
- "The Hispanic population will grow by 33%, the U.S. population by less than 10%.
- "U.S.-born white males will make up only about 15% of the net increase in the labor force.
- "Companies that can't learn to attract women, blacks, Hispanics or Asian men will face a shrinking pool of desirable employees."

The aging baby-boomers have left a demographic vacuum in their wake, leaving many in the green industry wondering how they'll attract tomorrow's employees from a shrinking work force.

The pendulum shifts

During the last 10 years, the green industry used much of its resources to address legislation affecting pesticide use and workers' rights. (Rightfully so.) But the 1990s bring new problems.

"It's a social issue, not a governmental one," says Alan Shulder, executive director of the Professional Grounds Management Society (PGMS). "How do we get the young people? They can work at McDonald's for $4.50 an hour; they're in an air-conditioned setting with flexible hours. In the green industry, they would be working in the summer heat at $4.00 an hour and they'd have to be to work at 6 or 6:30 a.m.

"The industry is just beginning to realize it's got to be competitive. Did you know that in some parts of the country, you have to pay $7.50 an hour just to hire a body?"

Shulder's key point: green industry businesses compete not only with their kin for good workers, but also with other labor-intensive industries.

According to *Business Week* magazine, the National Restaurant Association (McDonalds and others) and the National Retail Merchants Association (K mart and others) both predict radical employee shortages in the

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next decade.

"I've talked to four other associations," notes Terry Peters, formerly of the Associated Landscape Contractors of America (ALCA). "Everybody sees labor force-related problems, and they've been exacerbated by the new immigration laws."

Peters says that ALCA will attack the lack of career-oriented landscape workers. The organization hopes to establish a national certification program which can be transferred between states. "It certifies demonstratable skills that can be used as a career base," Peters notes. "We're at the point of having a proposal ready, and we could have it up and running in the next year or so."

The Professional Lawn Care Association of America (PLCAA), meanwhile, will deal with the predicted labor shortage in great detail at its annual convention Nov. 4-7 in Las Vegas. Almost six hours of educational sessions will be devoted to the subject, including part of a two-hour panel discussion, "Issues of the '90s," on Nov. 7.

The trained

ALCA, which cooperates with 18 colleges and universities, notes a significant decline in horticulturally-oriented students. The organization's annual field day—a two-day series of landscape-related tests given graduating seniors—is becoming what Peters calls "horrendous competition" for the services of able students.

According to Clarence Davids of Clarence Davids & Sons, Blue Island, Ill., "Many universities estimate that a student has an average of seven job offers upon graduation."

So, more and more, the professional organizations are realizing that young people must be called upon at the junior and senior high school levels. They've recently received help from the Future Farmers of America (FFA).

"We have had insufficient emphasis in the turf/landscape area," says Dr. Alan R. McDaniel of Virginia Tech, FFA contest supervisor. A new contest, beginning in 1991, "represents an introduction to horticulture, landscaping and turf at the high school level.

"We must introduce more students to the personal and career rewards in landscape horticulture," McDaniel observes. "But we really need to 'turn on' these students (to horticultural careers) *before* they start college."

The untrained

Unskilled, untrained labor could be in even shorter supply than trained people. *Business Week* says that the number of 18- to 24-year-olds will fall nearly 10 percent by 1995 while jobs available will increase by more than 10 percent. Few occupations will be unaffected, it says. "In suburbs across the country, gas stations, fast-food outlets and retailers are already offering up to $6.50 an hour for jobs that elsewhere pay the $3.35 minimum wage."

Peter F. Drucker, a noted author of books on business management, has his own concerns:

"In all developed societies, the able, intelligent and ambitious members of the working class stay in school beyond the point at which they are eligible for manual work. Young manual workers of today start out with a feeling of failure, a conviction of being second-class citizens. They need responsibility to overcome their feelings of insuperiority.

"To make a living is no longer enough. Work also has to make a life (career)."

There is an additional factor, according to Jim Brooks, the PLCAA's executive vice-president.

"The people aren't coming from the farm any more," he observes. "One of the comments that I've heard is that, because (potential workers) are not coming from the farm, what they know about pesticides is what they've been reading. There could be some that choose not to even apply.

"I've heard of companies in the Northeast, where unemployment is at four percent, not getting *any* applicants after running newspaper ads."

Hands-on help

For individual green industry operations, the three keys are recruiting, selecting and retaining (see related article). Technology, too, will make a

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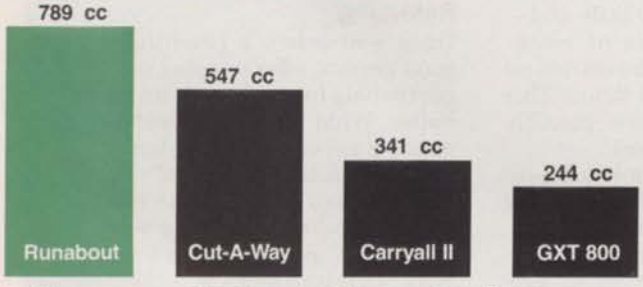

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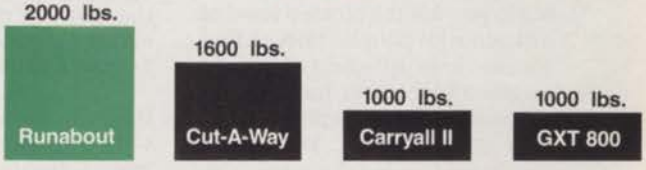

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SOLUTIONS TO THE WORKER SHORTAGE

Improving the American workforce during the next 15 years is critical to economic growth.

In fact, to the extent that economic growth depends on an educated workforce, it is estimated that we must upgrade the skills of some 25 million American workers by 40 percent by the end of the century if we are to maintain a growth rate of even three percent.

As it is, there promises to be a shortage of skilled workers and high unemployment in many categories. White males will make up only 15 percent of the additions to the labor force between now and the year 2000. The rest will be women, minorities and immigrants.

The result could be a workforce desperately in need of education to meet the demands of higher skilled jobs and a significant population of inadequately educated employees for even entry level jobs.

A system

U.S. Lawns Inc. franchises landscape maintenance companies. When the company began three years ago, the greatest concern of our franchises was in estimating and sales help. We provided heavy support in this area. As they matured and grew, we provided help with bookkeeping, cash flow, customer service and technical problems. Now, however, the major concern for our franchisees (and the area in which we are trying to provide the greatest level of assistance) is people. How to find people, how to select the right people and how to train people efficiently are all major issues with our franchises. We at U.S. Lawns try to solve these very different problems in three very different ways.

Recruiting

The first and most obvious problem is recruitment. Some companies import workers from areas where there is a surplus, like Texas. Workers can also be imported from South America or Mexico under temporary work permits.

Another source of help, especially in the summer, is the school system. Coaches and guidance counselors are very helpful in supplying names of interested students, particularly those coaches who wish to keep their players in shape over the summer. Landscape maintenance is a wonderful way to keep athletes "fine-tuned" over a summer vacation.

Work study programs are also appropriate, especially when hours are flexible. Our largest franchise is experimenting with working at night on commercial properties with high-powered lights. It is cooler; some individuals like to work the evening or night shift; and—with the exception of weeding—activities can be carried on with high-powered lights. This is opening up a new possible market for employees.

Dr. Cabot L. Jaffee is the chief executive officer of Electronic Selection Systems of Orlando, Fla. He is also Chairman of the Board of U.S. Lawns Inc., a company that franchises landscape maintenance services. Dr. Jaffee, who has been on the faculties of the University of Tennessee and the University of Central Florida, is a member of the American Society for Training and Development.

Many cities have youth programs which provide a source of potential employees.

For many people in drug rehabilitation and offender programs, work is a wonderful opportunity to deal with their problems in a positive way and develop job skills.

Boys' and girls' clubs also provide a source of good potential workers who are interested in learning workable skills.

Perhaps the most exciting and innovative approach so far has been our "High Potential Franchise Program" in which talented high school, college or vocational school graduates are assigned to work for an existing franchise for two years. Money is withheld from their salaries and placed in an account for them. U.S. Lawns matches the amount withheld; at the end of the two years, they purchase a franchise themselves. (If they withdraw from the program before the two years is up, their money is returned with interest.)

Obviously, there are many other ways to source a good workforce for the industry. Speaking at schools, participating in career days, getting involved in community activities—all open up potential sources of workers.

Selecting

After you find workers, the next step is selecting the ones who are likely to be successful. This is especially important at the foreman or supervisor level as these people signficantly influence the turnover rate. U.S. Lawns applies this same philosophy when selecting franchises.

A good selection test to determine people most likely to be good supervisors will go a long way in decreasing turnover. We recommend to our franchisees that they check references, interview applicants carefully and use tests we supply them to help select good supervisors.

Retaining

Once you select a potentially good person, offer ongoing support to help him or her do the job better. What we recommend is ongoing supervisory training in how to coach and counsel employees, how to discipline employees and how to make sure employees' problems are dealt with fairly and quickly.

When we are competing with fast food companies, service companies and so many others, the importance of reducing turnover is great. We try to create a feeling among our workers that they can move up in the organization and become supervisors themselves.

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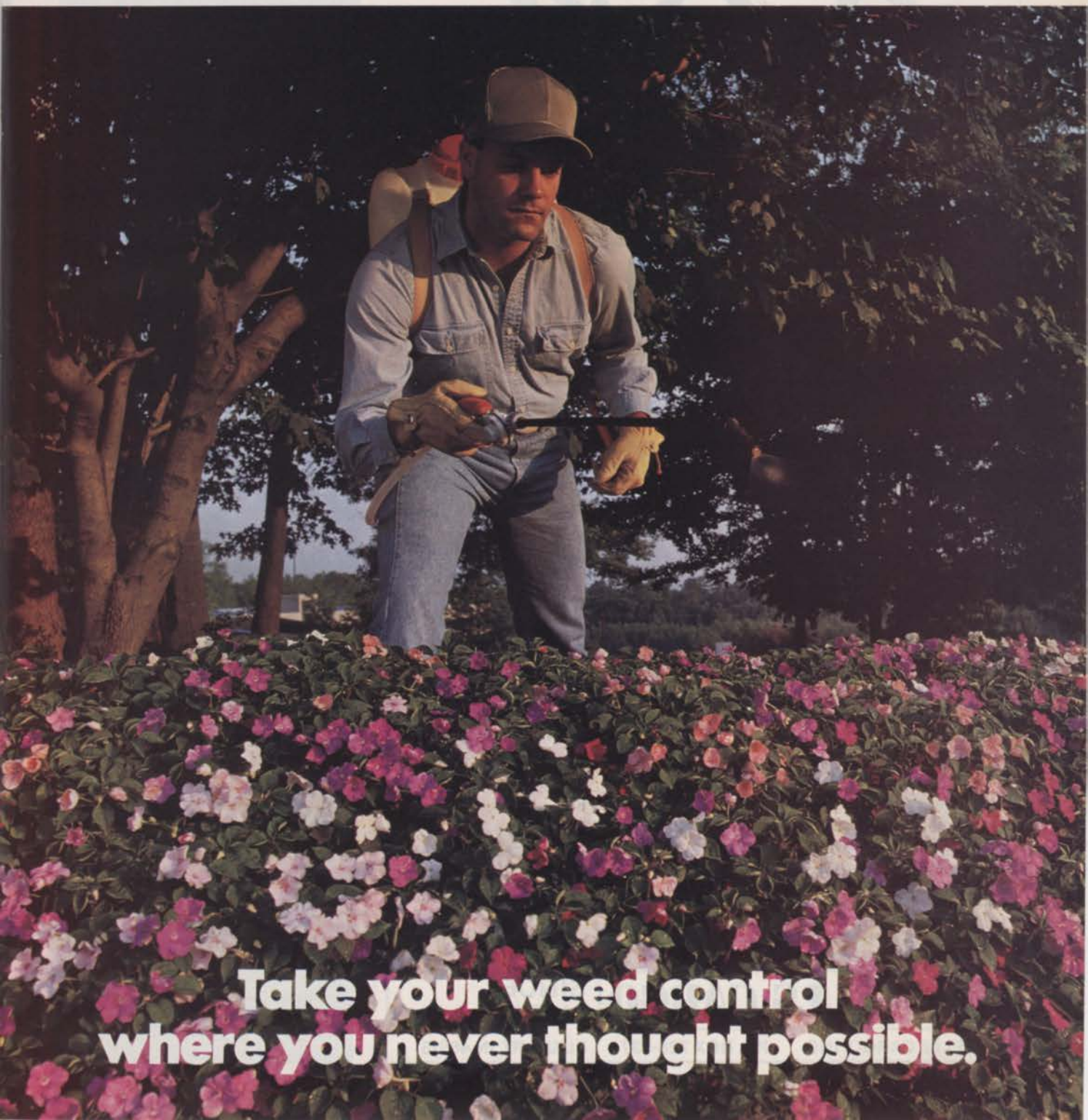

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Circle No. 138 on Reader Inquiry Card

MANPOWER *from page 24*

ing or other types of incentive plans help retain workers. These plans make them feel as if they are contributing to the overall success of the company and are being rewarded for it. The keys to retaining employees are good supervisors—and good supervisors come from selecting people with good skills and training them as much as possible.

A lesson of the '80s that will only grow in importance is that

People, rather than machines or capital, are the critical factors in the service economy.

people rather than machines or capital are the critical factors in fueling this needed growth in the service economy. It is also clear that education relates very strongly to individual opportunity. People who receive job training earn 25 percent more than individuals who do not.

This is the message we must give to our employees. We will help teach them valuable skills, we will offer them career opportunities and perhaps, most importantly, we will treat them in a way which makes them feel rewarded by what they do.

So, what appeared to be a simple and straight-forward problem is really not. It's not just a problem of finding people. It's a problem of selecting and developing good supervisors in order to cut down on turnover and therefore create less need to find new people. It's also a problem of what each organization must do to create feelings of career opportunities among all employees—which will also cut down on turnover.

No one part can totally solve the problem.

There will be shortages of employees. Innovative approaches will be necessary. But the successful organizations will be the ones that do the best job of keeping their people.

—*Cabot L. Jaffee, Ph.D.* □

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Mazda B2200 Cab Plus. Combining spaciousness with practicality, the Cab Plus is the first extended-cab compact truck that allows two adults to sit facing forward in optional rear jump seats.

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MAZDA	TOYOTA	NISSAN	FORD	CHEVROLET†
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Mazda trucks: Offer the most truck for your money.††

Standard Features	Mazda B2200 Base	Toyota Standard	Nissan Standard	Ford Ranger "S"	Chevrolet S-10 "EL"
5-speed	Standard	N/A	Standard	Standard	Standard
Automatic transmission	Optional	N/A	Optional	N/A	N/A
Double-wall cargo bed	Standard	Standard	Standard	Standard	Standard
Tinted glass	Standard	Optional	N/A	Standard	Optional
Steel-belted radials	Standard	Standard	Standard	Standard	Standard
Full carpeting	Standard	N/A	N/A	N/A	N/A

To find out even more ways Mazda outperforms the competition, contact:
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Or call (714) 727-1990.

* J.D. Power & Associates 1986 and 1987 Compact Truck CSI and 1988 Light-Duty Truck CSI customer satisfaction with product quality and dealer service.
** Warranty coverage without deductible. See your Mazda Dealer for limited warranty information.
† GM's 36-month/50,000-mile "Bumper-to-Bumper Plus" Warranty requires $100 deductible per visit after 12 months/12,000 miles.
†† Comparisons with other makes based upon available competitive data.

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OPEN HEAVENS CAN'T CLOSE OPEN COURSE

Superintendent Joe Hahn faced the challenge of his life when rain pelted his course for 12 days before the U.S. Open championship.

by Ann Reilly

There was no joy in Mudville for either players or spectators at Oak Hill Country Club this summer during the U.S. Open.

Players took to the practice green after play was suspended Friday because of excess water.

The 1989 U.S. Open golf championship will not be remembered by Oak Hill Country Club superintendent Joe Hahn for Curtis Strange's second straight Open victory. It'll be remembered for the rain.

"That was the worst it's ever been for me," Hahn observes now. "The challenge was there, as I imagine it was for a lot of superintendents at major events last summer."

Nothing short of a miracle kept the Open on schedule through that Sunday afternoon. Before practice rounds started in Rochester, N.Y. that week, six inches of rain had already fallen during the first 12 days of June. Almost one-half inch of rain fell that Tuesday morning, and the skies burst open again on Wednesday morning.

By then, the decision had already been made not to allow automobile parking on the West Course in fear of seriously damaging it, leaving 6,500 drivers scrambling to find alternative places to park. On Wednesday afternoon, a line of spectators had to wait for more than an hour to catch shuttle busses to nearby and not-so-nearby parking facilities.

On Friday, play was suspended for 45 minutes while the crew squeegeed the greens. Leaves that had fallen during the rain also had to be blown away (although the crew was not drying the greens with blow dryers as a television reporter suggested).

If things weren't already bad enough, so much rain fell on Friday night that a creek on the sixth hole overflowed. The sixth hole, the main entry road and parts of the fifth, seventh and eighth fairways were left under water.

USGA officials were ready to suspend play on Saturday and revert to their contingency plan: play 36 holes on Sunday. But Hahn convinced them that the course could be readied.

Local fire trucks were brought in to pump 1,000 gallons of water a minute off the course. Squeegees, which were a common sight all week, were manned by other local superintendents to remove water. After being given two more hours by the USGA to cut the greens, the crew had the course ready. Play started at noon Saturday on both nines. Some of the fairways were completely cut; others were cut around wet spots.

"ABC-TV said the golfers thought the course was very playable," Hahn notes. "But I don't think a person would want to go through that every year. It's a lot of fun to meet the challenge, but if you had the adverse conditions and you had to do it every year, it'd get old quick."

continued on page 32

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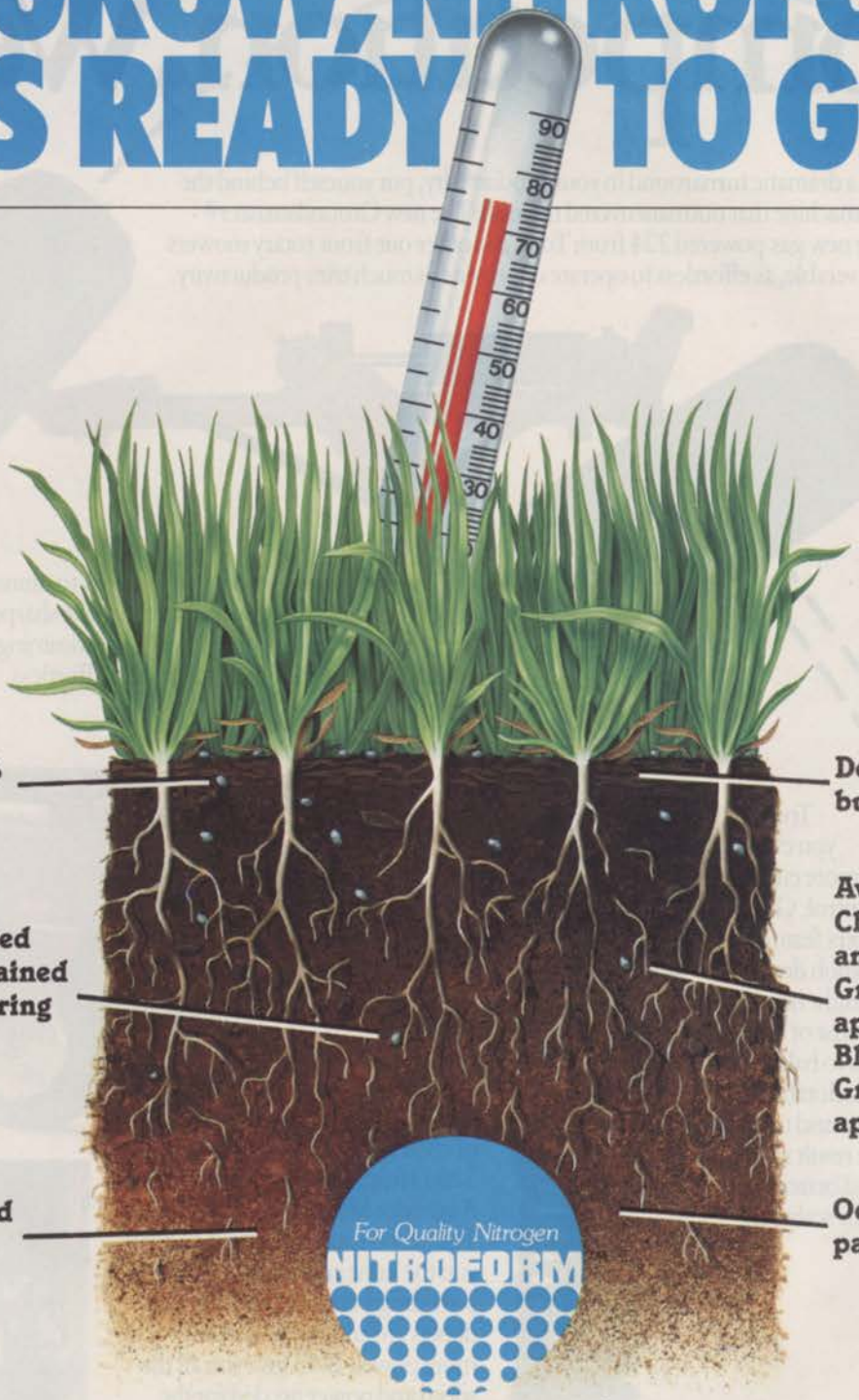

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THE CLEAN-UP JOB: A MONTH-LONG PROJECT

After the U.S. Open finished and a light drizzle fell during the awards ceremony, Oak Hills superintendent Joe Hahn was faced with the challenge of putting the course back in shape—no small task.

The stakes and ropes were taken down within the first two days. Outside contractors had the tents down after a few days, and in two to three weeks the bleachers disappeared. The ropes, screening cloth and the wood used in the scoreboards will be sold to the Medinah Country Club, site of the 1990 Open, in the same manner they were acquired from The Country Club in Brookline, Mass., where the Open was held last year.

Member play was scheduled to resume the day after the Open—it was a day of sunshine so desired the week before. Guests returned on June 27.

After the Open, the playing areas of the course were not the parts that needed the most attention. What did were the muddy grassless areas, the result of the thousands who had fought the elements for a glimpse of Strange, Kite, Beck, Woosnam and McCumber.

Hundreds of yards of wood chips had to be removed, along with many sheets of plywood that had been placed around the course to make the steep hills maneuverable and to protect the ground. The bare areas were aerified and overseeded; it took several weeks of cooperative weather for the areas under irrigation to get back in shape.

—*Ann Reilly*□

US OPEN *from page 28*

On May 1 of this year, an outside contractor began putting up grandstands and tents. Hahn held his breath as the last bleacher was finished on Monday, the day before the first practice round. ABC started building its television towers on May 17.

An early start

Membership priorities were certainly infringed upon during the get-ready stages, but members actually missed only one day of play before the Open.

The maintenance crew, which totals 32 for the two courses at Oak Hill in normal years, was increased to 40 this year. An additional five-man swamper crew was hired to put up and take down ropes and stakes and to build scoreboards.

Eleven of Hahn's employees have or are working toward advanced degrees in turfgrass management. Rusty Madden is the assistant supervising the East Course, and assistant Joe Frank heads up the West Course.

Crunch time

A month before the Open, some members of the crew voluntarily began working 80-hour weeks. ("We let them decide," Hahn notes. "It wasn't mandatory.") Their days started at 6 or 7 a.m., 4:30 a.m. during the Open. Because of the weather problems during the Open, work often wasn't done until 10 p.m. The crew's available time to work was naturally limited, because once the crowds arrived and play started, there wasn't much they could do.

USGA tour agronomist Tim Morgahan began visiting Oak Hill monthly during the summer of 1988. This year, he arrived on May 26 and,

Joe Hahn says bad conditions would make superintendent-ing "old quick."

working with Hahn, had a daily goal of insuring that the course was firm and fast.

Their game plan was to take Stimpmeter readings each morning after the greens were double-mowed and groomed, and from that determine what activities would take place in the afternoon: double-rolling for firmness or grooming for speed. Naturally, the schedule changed.

The plan was to cut fairways, approaches and tees every morning to $^{5}/_{16}$-inch, cut the greens every morning to $^{7}/_{64}$-inch and cut the intermediate rough every afternoon to two inches. Because of water on the course, the fairways were cut in the afternoon rather than in the morning. Fairways and greens were rolled more often than originally planned. The primary rough was cut on Monday before the practice rounds to a height of four inches and was not re-cut during the Open.

Players in the 1985 Senior Open had expressed concern over the severity of the slope leading to a pond on the 15th green. Therefore, a retaining wall was built and the area leveled to make an unfair situation manageable. An improved tee was built on the fifth hole to lengthen the hole. The seventh tee was enlarged and the sixth tee leveled. The bunkers on No.5 were reconstructed: one was eliminated and the remaining two were converted to splash bunkers. Throughout the course, all of the bunker edges were restored.

Making it MEM

For the past three years, fairways were aerated five or six times each year, and lime was applied to reduce thatch. Two years ago, the crew began triplex mowing the fairways. Perennial ryegrass was introduced to the roughs, which were primarily bentgrass and *Poa annua* (a result of previously narrowed fairways). One objective over the past two years was to make the course firmer than for normal membership play.

Hahn, father of seven and a new grandfather, is in his seventh year as superintendent at Oak Hill. In all, he has 34 years of experience in golf course management. Surprisingly, he remained very calm and cool during the unexpected turn of events.

"You do everything you can," he explains. "I feel bad for my crew, which worked so hard to prepare the course and then had the weather turn that way." **LM**

Ann Reilly is a long-time contributor to Landscape Management. She is a freelance writer/photographer specializing in plant and wildlife topics with residence in Massapequa Park, N.Y.

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- **Caliente** ranks high in trials for fine leaf texture and good mowability. It is excellent for overseeding dormant turf and establishing permanent lawns. Perfect for use on golf courses, parks, playgrounds, home lawns, and general turf areas. It's the homeowners choice as well as the professional turf managers.

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Circle No. 139 on Reader Inquiry Card

THE HARVEST IS IN (. . .and pert' near gone!)

Seed producers' hopes for a harvest of plenty were altered by weather, lower production and strong demand.

by Terry McIver, associate editor

A Boy Scout would have a field day as a grass seed grower or marketer. He'd always have to "be prepared."

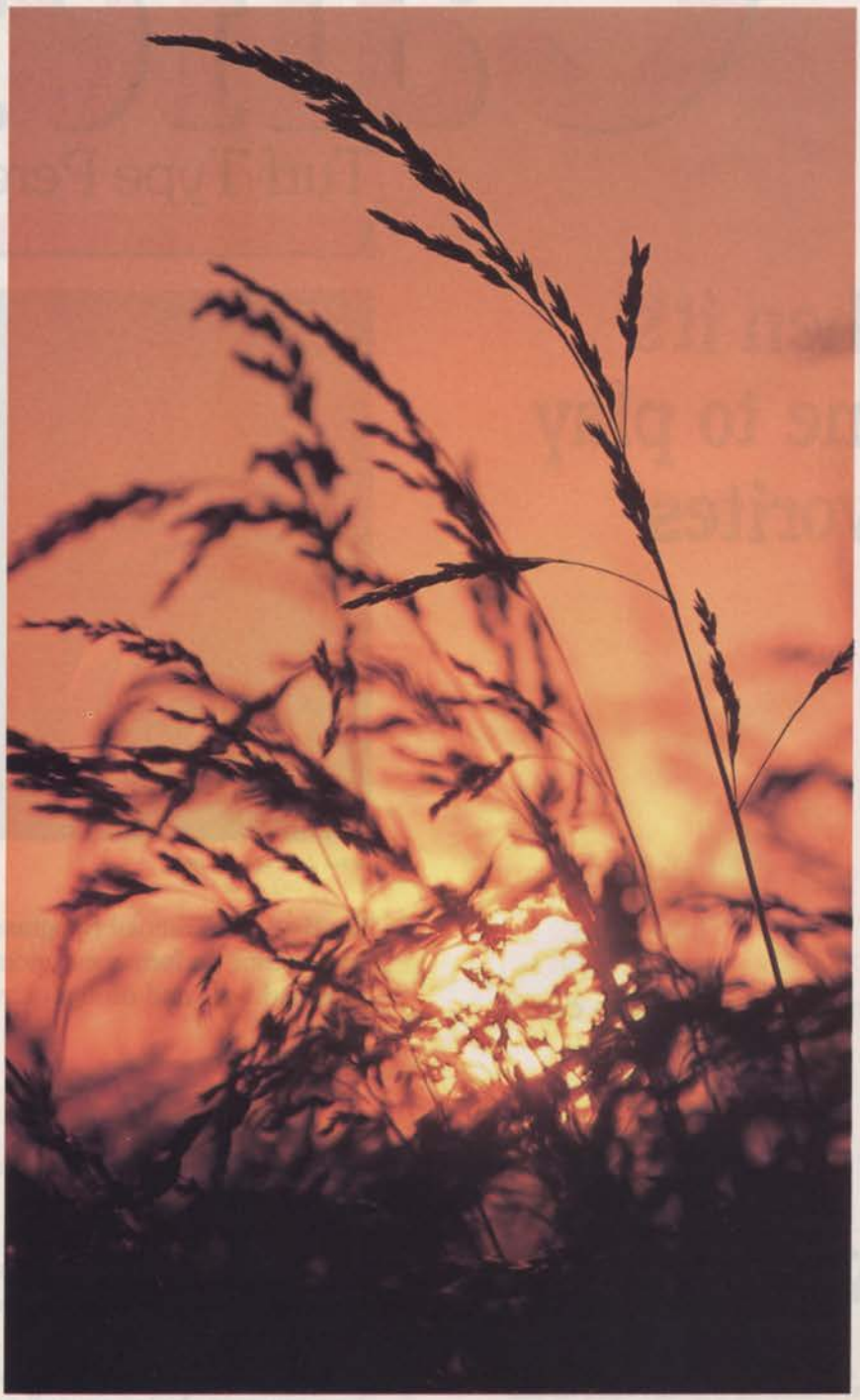
Heavy demand and fickle weather conditions contributed to a less-than-anticipated 1989 harvest for many seed varieties, most notably tall fescues.

Last year it was the drought. This year rain was plentiful, but at the wrong times.

"All the fescues are low," says **Doug Toews** of International Seeds. "The weather did it. We had the cold spell in December, then little rain, then lots of rain, and some more rain at harvest time. It was six of one, half-a-dozen of another."

'The demand for tall fescue is as hot as ever! Industry-wide, it's been. . . spotty, production, increased demand and weather.'

—Joe Churchill
Northrup King



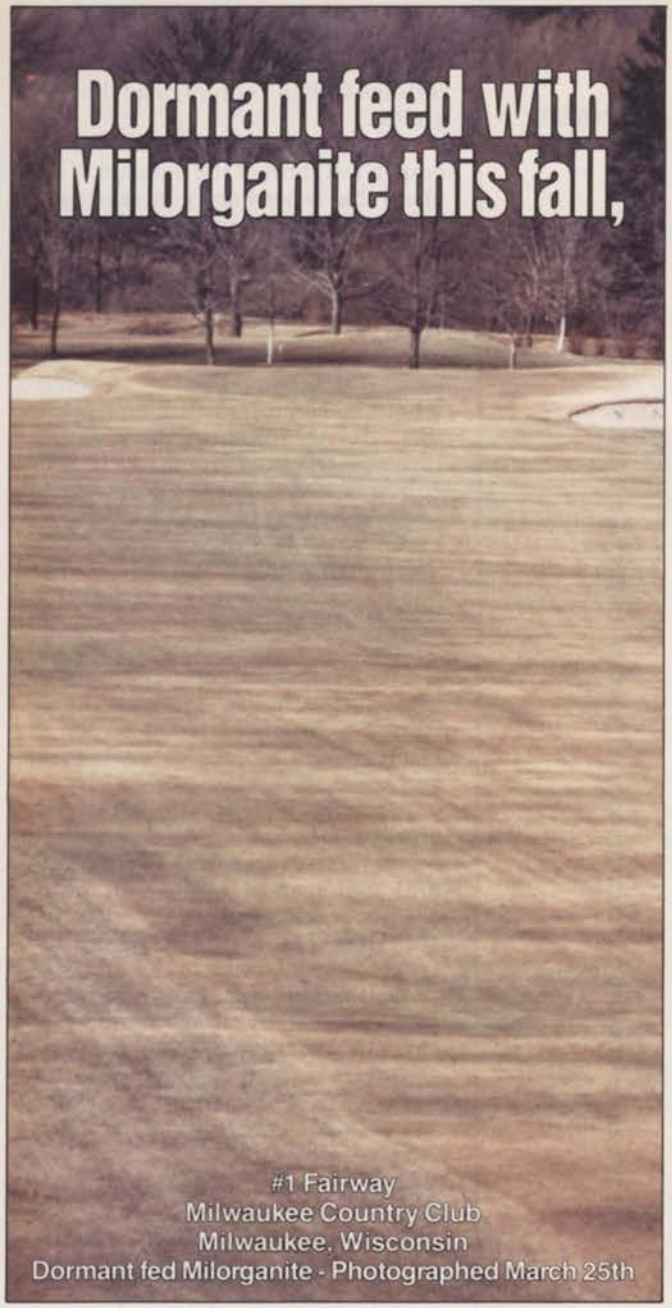
Also, field burning was interrupted for several days in 1988 after the I-5 accident, and some think the interruption ultimately caught up with production.

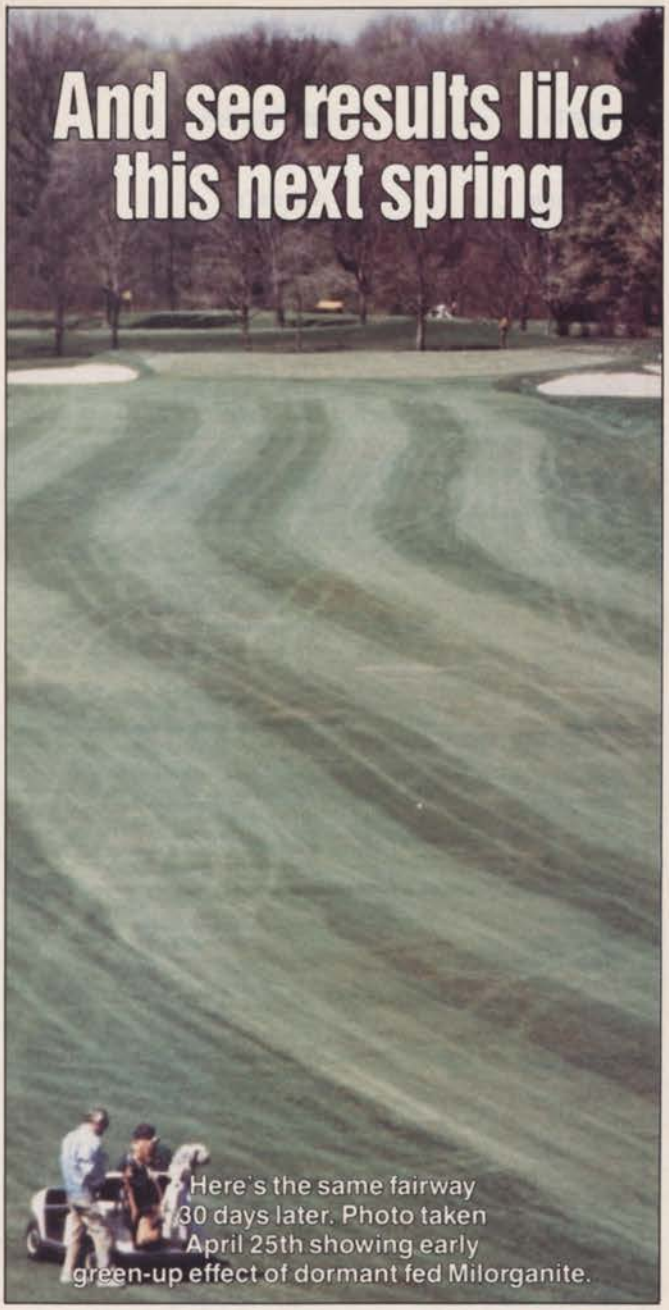
Tall fescues hardest hit

Turf-type tall fescues took a real beating this time around.

"We think it was a number of weather-related factors," says **Mike Robinson**, president of Seed Research of Oregon. "There was late rain in November, a late green-up, and then the cold weather in February. And after the cold spell, wet weather held up fertilizing in February."

Though fertilizing schedules might differ slightly among growers,


Dormant feed with Milorganite this fall,
#1 Fairway
Milwaukee Country Club
Milwaukee, Wisconsin
Dormant fed Milorganite - Photographed March 25th


And see results like this next spring
Here's the same fairway 30 days later. Photo taken April 25th showing early green-up effect of dormant fed Milorganite.

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TURF-TYPE TALL FESCUE

VARIETY	MARKETER	AVAILABILITY
Adventure	Warren's	C
Apache	Turf Seed	B–
Arid	Jacklin/Olsen-Fennel/ Northrup King	B/C/B
Avanti	Warren's	C
Bonanza	Olsen-Fennel/Proprietary/ Van Der Have	C/C/C
Bonsai (dwarf)	Turf Merchants	C
Brookston	Turf Merchants	C
Chesapeake	O.M. Scott	B
Chieftan	Roberts	C
Cimarron	Lesco	B
Clemfine	Lofts Great Western	A
Cochise (dwarf)	Ampac	S
Crossfire	Pickseed	C
Emperor	Zajac Performance Seeds	C
Falcon	Olsen-Fennel/E.F. Burlingham	C/S
Finelawn I	Fine Lawn Research	C
Gala	International	C
Galway	Northrup King	C
Guardian	Roberts	C
Houndog	International	B–
Hubbard	Hubbard Seed & Supply	C
HRZ-18	Van Der Have	C
Jaguar	Zajac Performance Seeds	C
Jaguar II	Zajac Performance Seeds	C
Maverick	Pickseed	B
Maverick II	Pickseed	B
Mesa	Jonathan Green	B
Mojave	Olsen-Fennel	C
Monarch	Turf Seed	B–
Montauk	Jonathan Green	C
Murietta (dwarf)	Turf Seed	C
Mustang	Turf Seed	B–
Olympic	Turf Seed	B–
Pacer	International	B–
Potomac	Jonathan Green	C
Rebel	Lofts Great Western	B
Rebel II	Lofts Great Western	B
Rebel Jr.	Lofts Great Western	C
Richmond	Jonathan Green	B
Silverado (dwarf)	Turf Seed	C
Shortstop	Pickseed	C
Survivor (blend)	Seed Research	B
Sundance (dwarf)	Turf Merchants	C
Taurus (dwarf)	Turf Merchants	C
Team (blend)	Pickseed	B
Thoroughbred	Pickseed	B
Titan	Seed Research	B
Trailblazer	Lesco	B
Triathalawn (blend)	Turf Seed	B–
Tribute	Lofts Great Western	B
Trident	Seed Research/Ampac	B/S
Triple Pro (blend)	Northrup King	B
Trophy (blend)	Seed Research	B
Turfgemm II (blend)	Turf Merchants	A
Turf Mates (dwarf blend)	Turf Merchants	C
Winchester	E.F. Burlingham & Sons	S
Wrangler	Lesco/Jacklin/Turf Merchants	C/C/C
SR 8200 (dwarf)	Seed Research	C

Robinson says those who were able to fertilize well in February had the best yields.

"We expect the 1989 tall fescue crop to fall short of the demand, a demand that is constantly increasing as users realize the advantage of turf-types over the older, forage-type tall fescues," says **Art Wick**, director of research and development for Lesco. Wick says grower costs have increased more than costs for the 1988 crop, which should reflect in somewhat higher professional user prices this fall. According to Wick, future turf-type tall fescue demand is difficult to measure, but Lesco expects to see a growing demand for several years.

The demand for tall fescues has been "as hot as ever," says **Joe Churchill** of Northrup King. "Some (of our) varieties in some areas have had winter damage in February. Galway was effected, but Arid is okay. Industry-wide, it's been a combination of spotty production, increased demand and weather."

"Our tall fescue supplies are adequate, but adequate isn't good enough," remarks **Gary Parker,** general manager of Lofts. Our older stands were primarily weak. It's weather related, fertilizer related . . . we don't have the answer."

On the plus side, Parker says new fields planted a year ago should help ease any pending shortages next year.

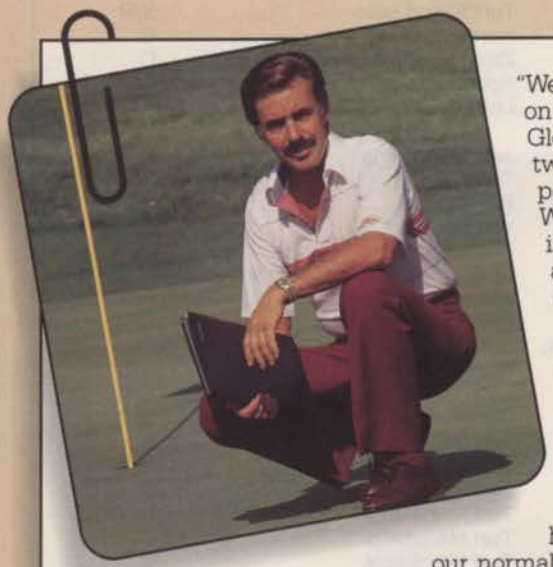
Gayle Ward of Jacklin Seed Co. finds the tall fescues very disappointing, with a 50 percent yield reduction. And **Tom Stanley** of Turf Seed sees many tall fescue yields as 30 to 50 percent short. The especially cold winter was something Stanley and others think may have been another negative factor.

Add to that a heavy demand. "There are more certified production acres of tall fescue than perennial ryegrass in Oregon," says **Steve Tubbs**, vice president and general manager of Turf Merchants, Inc. However, demand for tall fescue is keeping supplies tight. "All tall fescues are yielding poorly due to reproductive tillers turning vegetative rather than producing seed heads," continues Tubbs, "and clean-outs are higher than expected due to empty florets.

"Regardless of demand, there is a virtual sell-out of all varieties at prices comparable to last year. In fact, it's the first time in history that the turf types have raised the price of Kentucky-31 as opposed to Kentucky-31 pulling the price of turf types down," says Tubbs.

Due to excellent demand for pe-

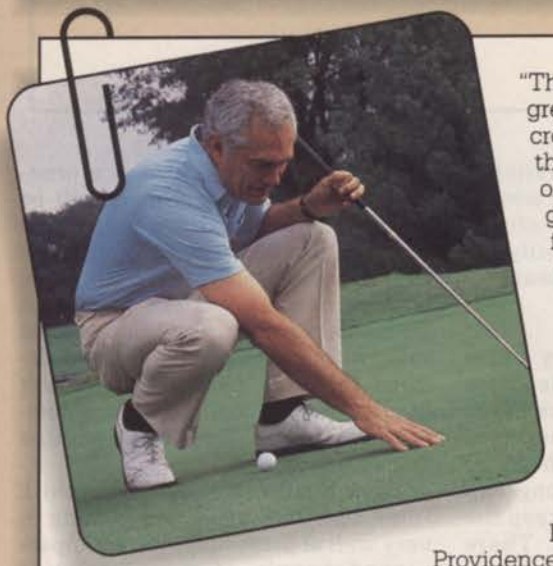
BENTGRASS



"We planted the 12th hole on Singing Hills' Willow Glen Course to SR 1020 two years ago, and it performed admirably. What's really significant is that members keep asking what we've done to the 12th hole that makes it putt so well! The members like SR 1020's performance from the players' point of view; we like that too, but we also value that we haven't had to change our normal greens maintenance program to achieve the results."

David Fleming

David Fleming, C.G.C.S.
Superintendent, Singing Hills Country Club
El Cajon, CA



"The newer golf course greens planted to Penncross look beautiful, but they don't putt like the old South German Bent greens. The putting surface of those old greens is fine-textured, not thatchy or grainy, and the old greens don't show the spike marks like Penncross. We've been needing bentgrasses bred for golf quality as well as turf quality for a long time, and it looks like SR 1020 and Providence fill the bill!"

Peter Trenham

Peter Trenham
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KENTUCKY BLUEGRASS

VARIETY	MARKETER	AVAILABILTY
A-34 Ben Sun	Waren's	C
Abbey	O.M. Scott	B
Able 1	Warren's	C
Adelphi	Jacklin/Northrup King	C/C
Alpine	Pickseed	B
Amazon	Jacklin	C
America	Pickseed	B
Aspen	Northrup King	B
Asset	Van Der Have	C
Aquila	Northrup King	C
Banff	Pickseed	B
Baron	Lofts Great Western	B
Blacksburg	Turf Seed	C
Boston	Jonathan Green	C
Bristol	O.M. Soctt	B
Bronco	Pickseed	B
Challenge	Turf Seed	B
Chateau	Fine Lawn Research	B
Cheri	Olsen Fennel	C
Classic	Peterson	B
Columbia	Turf Seed	A
Common	Full Circle	B
Compact	E.F. Burlingham & Sons	C
Coventry	O.M. Scott	B
Cynthia	Van Der Have	C
Dawn	Turf Seed/Lesco	B/B
Destiny	Jonathan Green	A
Eclipse	Jacklin/Zajac/Peterson	B/C/C
Enmundi	Seed Research	C
Estate	Roberts	B
Freedom	Jacklin	B
Fylking	Jacklin	B
Georgetown	Lofts Great Western	B
Glade	Jacklin	B
Gnome	Turf Merchants	A
Haga	E.F. Burlingham & Sons	B
Harmony	Seed Research	B
Huntsville	Jacklin	B
Ikone	International	C
Julia	Turf Seed/Lesco	B/B
Kelly	Northrup King	C
Liberty	Zajac Performance Seeds	C
Limousine	Roberts	C
1757	Lofts Great Western	
Merion	Jacklin/Roberts	C/C
Midnight	Turf Seed	C
Merit	Full Circle	B
Minstrel	Van Der Have	C
Monopoly	Peterson	C
Nassau	Lofts Great Western/Jacklin	B/B
Nugget	Jacklin/Pickseed	B/B
P-104 (Princeton)	Lofts Great Western	C
Parade	Northrup King/Van Der Have	B/C
Ram I	Lofts Great Western/Jacklin	B/B
Rugby	Northrup King/Turf Merchants	B/C
Sophia	Van Der Have	B
Suffolk	Jacklin/Lofts G. Western	B/C
Sydsport	Burlingham	C
Tendos	Turf Merchants	B
Topfit	Turf Merchants	C
Topstar	Turf Merchants	C
Touchdown	Pickseed	B
Trenton	Northrup King	B
True Blue	Turf Merchants	A
Victa	O.M. Scott	B
Wabash	Jacklin	B
Washington	Jonathan Green	C
SR 2000	Seed Research	C
SR 2100	Seed Research	C

Availability Key: A-surplus B-adequate C-limited T-testing only S-sold out

rennial ryegrass, supplies this year of Pennant, Belle and Competitor will be limited, says **Shari Burlingham** of E.F. Burlingham & Sons. "Competitor, our new variety, will be included in our mixtures this year. We'll custom blend it to meet individual needs and requirements."

Tubbs said most of TMI's proprietary perennial ryegrasses will be in adequate supply, although the crop isn't nearly as good as 1988's—increased acreage should offset decreased yields.

This harvest yielded the first crop of Bonsai dwarf fescue, a specie that has been sparking interest throughout the industry. According to Tubbs, recent excavation of a 10-month-old Bonsai sod plot in southern California proved conclusively that Bonsai's roots extended a full six feet below the surface. "So there is no truth to the speculation that the dwarfs have shallow root systems," says Tubbs, who believes Bonsai and similar varieties will take over the turf market west of the Mississippi due to their attractiveness as turf with drastically reduced maintenance requirements.

Bring on the blues

"The yields for proprietary bluegrasses were nothing to write home about," says Tubbs. "Most are based on the price of common bluegrasss, which is cheaper than it has been for several years and awfully strong. Fall demand will be required to keep the proprietaries from slipping. There will be some shortage of older, lower yielding varieties, but more than ample supplies overall."

Fine Lawn Research's **Bill Junk** says the Chateau Kentucky bluegrass crop will be adequate. Midnight fans will be glad to hear from Turf Seed's Stanley that recent acreage increases for Midnight should result in adequate supplies by crop year 1990.

Harry Butler, Jacklin's vice president of marketing, says there will be selected shortages on some of the lower seed-yielding varieties of proprietary Kentucky bluegrass. "There is a slight increase in acres over last year," says Butler, "however, we still do not have sufficient producing acres to meet demand. New acres have become difficult to place due to other competing commodities, such as wheat, corn and other grain products."

Says Northrup King's Churchill: "Our bluegrass yields are coming in very well at press time. We anticipate a good supply of most varieties throughout the year."

Churchill also reports adequate supplies of the "Penn Pals" bentgrasses.

Sources say most of the proprietary fine fescues grown in Oregon are disappointing contractors with both yields and clean-outs, and there is a great disparity between the common

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Canadian red fescue crop and the Oregon fine fescue crop. Chewings and hard fescues could be in short supply, especially if strong demand for certified varieties from Europe continues.

"Many factors limit successful increase in production acres," says **John Zajac** of Zajac Performance Seeds.

"Demand in most segments remains good. Therefore, I expect the higher quality, better marketed varieties to remain in a 'no surplus' condition for some time." **LM**

Canadians still enjoy '88 crop

Though the United States is a net exporter of turfseed, some of what New Zealand and Canada exports may find its way here.

From New Zealand comes perennial ryegrasses Nui and Ruanui, which are harvested in January. Usually pegged for forage use, they may have lawn applications.

Estimates are that New Zealand will import as much as 20 million pounds of seed this year, according to Dave Nelson, director of the Oregon Fine Fescue Commission.

Rain has kept Canada's harvest of fescue and forage seed down significantly from last year, according to Al Dooley, a special commodity analyst with Alberta Agriculture. Canada exports about 20 million pounds of fescue annually, some of which finds its way into bluegrass mixtures.

"The United States is our most important market by a long shot," says Dooley. "You guys take 70 to 90 percent of our export."

Canada's principal turfgrass is the creeping red fescue Boreal, used primarily as a filler in Kentucky bluegrass mixtures.

"We feel it's a good variety because of its shade tolerance, hardiness, and the fact that it's a creeper that fills in bare spots well," says Marvin Nakonetchny, secretary master of Canada's Forage Seed Council. The exportability of Boreal depends on U.S. demand, says Nakonetchny, and the current market price of 25 cents/lb. is likely to send most of it into storage.

"The fact that it's sold as a no-name variety in the U.S. is a problem we should address," he adds.

Canadian seed comes from the prairie provinces: the Peace River region of Alberta, Saskatchewan and Manitoba. Last year Canada enjoyed an exceptional crop, says Dooley. That resulted in the export of approximately 18.5 million pounds of fescue, 13.6 million pounds of red clover, 8.0 million pounds of sweet clover, 5.25 pounds of alsike clover and 1.5 million pounds of bromegrass clover.

Because of the region's climate, storing the seed for several years is not a problem. As a result, last year's bumper crop is still on hand should America's bluegrass market take off this fall.

A very limited amount of Canada's acreage does consist of bluegrasses. Canadians are also looking at turf-type fescues and ryegrasses, "... but so far it's insignificant," adds Nakonetchny.

—*Will Perry*□

ROUGH BLUEGRASS

VARIETY	MARKETER	AVAILABILITY
Laser poa trivialis	Lofts Great Western	B
Sabie	International	B

COMMON BLUEGRASS

VARIETY	MARKETER	AVAILABILITY
Argyle	Olsen-Fennel	B
Kenblue	Jacklin/Olsen-Fennel/ Turf Merchants/Roberts	B/B/A/C
Merit	Van Der Have	B
Newport	Olsen-Fennel/Van Der Have/Northrup King/Roberta	C/B/B/B
Park	Jacklin/Turf Merchants/ Northrup King/Roberts	B/A/B/B
S-21	Jacklin	B
South Dakota	Jacklin	B
Troy	Jacklin	B
Garfield	Jacklin	B

WINTER OVERSEEDING BLENDS

VARIETY	MARKETER	AVAILABILITY
Alliance	Turf Seed	B
CBS II	Turf Seed	B
Champion	Seed Research	B
Dixie Green	International	B
Dixie Green tall fescue	International	B
Dixie Green + Sabre	International	B
Double Eagle blend	Lesco	B
Double Eagle + Sabre	Lesco	B
Eagle Blend	Lesco	B
Futura Plus	Pickseed	B
Futura 2000	Pickseed	B
Futura 2000E	Pickseed	C
3CN Intermediate Ryegrass	Lesco	B
Magnum	Proprietary	B
Medalist 5	Northrup King	B
Medalist 6	Northrup King	B
Medalist 7	Northrup King	B
Medalist 7 + Sabre	Northrup King	B
Medalist 300	Northrup King	B
Medalist 400	Northrup King	B
Medalist 400 +	Northrup King	B
Medalist 60/40	Northrup King	B
Par Blend	Lesco	B
Pennway Bent Blend	Lesco	B
Bent Blend Plus	Lesco	B
Ph. D.	International	B
Playmate	Roberts	B
Spectrum	Turf Merchants	B
Symphony	E.F. Burlingham & Sons	C
Tara-Green	Hubbard Seed & Supply	B
Transtar	Lesco	B
Triple Play Rye	Fine Lawn Research	B
Trilogy	E.F. Burlingham & Sons	C
V.I.P. Rye	Turf Merchants	B
Winter Turf I	O.M. Scott	B
Winter Turf III	O.M. Scott	B
Winter Turf V	O.M. Scott	B
Winter Turf IX	O.M. Scott	B

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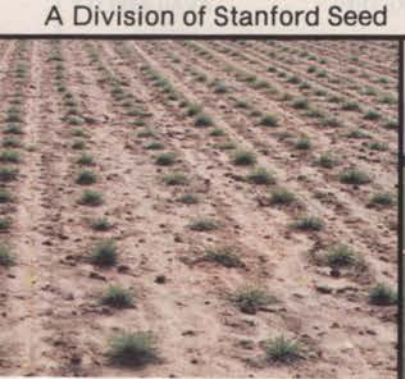

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PERENNIAL RYEGRASS

VARIETY	MARKETER	AVAILABILITY
Allaire	Jonathan Green/Turf Merchants	A/B
All*Star	Jacklin	B
Assure	Lesco	C
Atlantic	Johathan Green	C
Aquarius	Turf Merchants	B
Barclay - Belle	E.F. Burlingham & Sons	C
Birdie II	Turf Seed	B
Blazer	Pickseed	B
Blazer II	Pickseed	B
Brenda	Van Der Have	B
Caddie	Northrup King	C
Calypso	Roberts	B
Champion	Seed Research	B
Charger	Turf Seed	B
Citation II	Turf Seed	A
Commander	Lesco	B
Competitor	E.F. Burlingham & Sons	C
Cowboy	Lofts Great Western	B
Dasher	Pickseed	B
Dasher II	Pickseed	B
Delray	Northrup King	B
Derby	International	B
Diplomat	Lofts Great Western	B
Elka	International	B
Envy	Zajac Performance Seeds	C
Fiesta	Pickseed	B
Fiesta II	Pickseed	B
Gator	International	B
Gettysburg	Jonathan	C
Goalie	Northrup King	C
Jazz	Pickseed	B
Lindsay	International	B
LEX 86	Pickseed	C
Magnum	Proprietary	B
Manhattan	Turf Seed/Turf Merchants	B/B
Mondial	Van Der Have	B
NK 2000	Northrup King	C
Nova	Seed Research/ Van Der Have	B/B
Omega II	Zajac Performance Seeds	C
Palmer	Lofts Great Western	B
Patriot	Turf Merchants	B
Pennant	Olsen-Fennel/Turf E.F. Burlingham & Sons	B/C
Pennfine	Olsen-Fennel/Turf Merchants/Northrup King/ Roberts	C/B/B/C
Pleasure	AMPAC	C
Plus	Olsen-Fennel	B
Polly	Daehnfeldt	B
Quartet (blend)	Van Der Have	B
Ranger	Van Der Have	B
Regency	Lesco	B
Repell	Lofts Great Western	B
Riviera	Roberts	B
Rodeo	Turf Merchants	B
Sheriff	Van Der Have	B
SR 4000	Seed Research	B
SR 4100	Seed Research	B
SR 4200	Seed Research	C
Sherwood	Jonathan Green	B
Stallion	Fine Lawn Research	B
246 Sunrye	Turf Seed	B
Tara	Ampac	B
Vantage	Proprietary Seeds	C
Vintage 2DF	Lesco	B
Yorktown II	Lofts Great Western	B
2H7	Van Der Have	C

SEED COUNTRY INSIGHTS

● Lofts' new Rebel Jr. turf-type tall fescue is doing okay its first time out, says **Gary Parker**. It yielded well, and the company is excited about Jr.'s prospects. Lofts is marketing five new varieties: the fescues include Rebel Jr., Bar-None and Tribute; bluegrasses 1757 and Suffolk, a joint venture with Jacklin Seed Co. Lofts' research director, **Richard Hurley**, thinks there's "real trouble ahead" for bluegrasses in the Northwest because "the turf-type tall fescue varieties are so good and they're going to be moving north . . ."

● Jacklin is moving ahead with its development of a turf-type redtop grass plant. **Dr. Doug Brede** has poly-crossed and harvested several types of the redtop. "We will plant out the progeny from this cross in 1989 to further refine a potential variety," says Brede. Redtop is a low maintenance variety that does well in adverse soil conditions . . .

● Demand for Longfellow chewings fescue grows each year, says **Doug Toews** of International Seeds . . .

● Northrup King is releasing a new Kentucky bluegrass variety, called Kelly. Good heat and drought tolerance, according to Northrup's **Joe Churchill** . . .

● Churchill also reports that Northrup will get an exclusive in 1990 on Pure Seed Testing's newest tall fescue, 5DM. To be renamed later . . .

● Maverick II is now available. Pickseed West calls it an improved turf-type tall fescue that is slower growing than the original Maverick, and has performed well in national tests . . .

● Charger is a new perennial ryegrass from Turf Seed, Inc. **Tom Stanley** reports it demonstrates dark green color, high density, lower growth habit and very good disease resistance . . .

● Mondial is an advanced synthetic turf-type perennial ryegrass cultivar developed by Mommersteeg. Van Der Have Oregon has it in adequate supply, and reports quick establishment as a benefit . . .

● Avanti is a new semi-dwarf turf-type tall fescue from Warren's Turf Nursery. High shade tolerance and low growth habit are two benefits. Limited in 1989; full production expected in 1990 . . .

● From Hubbard Seed & Supply: Hubbard 87 is a new dwarf turf-type tall fescue variety developed with **Dr. C. Reed Funk** of Rutgers University. Production will be controlled by Hubbard to meet the sod quality market needs; limited through 1991 crop year. Sod-Gem Turf-Type featuring Hubbard 87 also is limited through 1991 . . .

—Terry McIver□

CREEPING RED FESCUE

VARIETY	MARKETER	AVAILABILITY
Dawson	Van Der Have/Northrup King	C/B
Flyer	Fine Lawn Research	C
Ruby	Van Der Have	C
Salem	Jonathan Green	C
Virtus	Turf Merchants	C
Vista	Zajac Performance Seeds	C

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CHEWINGS FESCUE

VARIETY	MARKETER	AVAILABILITY
Atlanta	Van Der Have	B
Atilla	Turf Merchants	C
Cascade	Olsen-Fennel	C
Center	Turf Merchants	C
Cindy	International	C
Dawson	Northrup King	B
Enjoy	International	B–
Ensylva	International	B–
Epsom	Van Der Have	C
Estacada	Turf Merchants	C
Fortress	Turf Seed	C
Jamestown	Lofts Great Western	C
Jasper	Pickseed	C
Koket	E.F. Burlingham & Sons	B
Longfellow	International	B–
Mary	Van Der Have	C
Pennlawn	Olsen-Fennel	B
Ranier	Olsen-Fennel	B
Ruby	Northrup King	B
Salem	Jonathan Green	C
Shademaster	Turf Seed/Lesco	C/C
SR 3000	Seed Research	B
SR 5000	Seed Research	B
Victory	Pickseed	B
Virtus	Turf Merchants	C
Wilma	E.F. Burlingham & Sons	B

HARD FESCUE

VARIETY	MARKETER	AVAILABILITY
Aurora	Turf Seed	A
Crystal	Lofts Great Western	B
Reliant	Lofts Great Western	B
Scaldis	Northrup King/Van Der Have	C/C
Silvana	Van Der Have	C
Spartan	Pickseed	B
Warwick	Jonathan Green	C

SHEEP FESCUE

VARIETY	MARKETER	AVAILABILITY
Azay	Pickseed	C
Bighorn	Turf Seed	C
MX-86	Jacklin	B
		B

Key: A-surplus B-adequate C-limited
T-testing only S-sold out

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BENTGRASS

VARIETY	MARKETER	AVAILABILITY
Carmen	Van Der Have	C
Cobra	International	C+
Dominant Brand	Seed Research	B
Exeter colonial	Pickseed	B
Kingstown Velvet	Pickseed	C
National (creeping bent)	Pickseed	B
Penncross	Northrup King/Turf Seed	B/B
Penneagle	Northrup King/Turf Seed	B/B
Pennlinks	Northrup King/Turf Seed	B/B
Pennway	Northrup King/Turf Seed	B/B
Providence	Seed Research	C
Prominent	Seed Research	B
Putter	Jacklin	B
SR-1020	Seed Research	B
SR-7000 Colonial	Seed Research	C
Tracenta	Van Der Have	C
V.I.P. Blend	Turf Merchants	A

ANNUAL RYEGRASS

VARIETY	MARKETER	AVAILABILITY
Dalita	Daehnfeldt	B
Gulf	Olsen-Fennel	B

OTHER

VARIETY	MARKETER	AVAILABILITY
Au Triumph	International	B
Cajun	International	B
Certified Streaker Red Top	Jacklin	B
Cheyenne Bermudagrass	Jacklin	C
Crusader ryegrass/ hard fescue mix	Seed Research	B
Fults alkaligrass	Northrup King	B
JM-107 zoysiagrass	International	C
Martin	International	B
Mozark	International	B
Reubens Canada bluegrass	Jacklin	B

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Don't let the future be a gamble! Plan for your company's growth into the next decade by being part of THE EVENT of the lawn care season: the 10th Anniversary Conference and Show of the Professional Lawn Care Association of America. Bet on a sure winner — **PLCAA/Las Vegas '89!** — four unforgettable days in the entertainment capital of the world. Non-stop excitement, education, celebration and jubilation await you November 6-9!

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Professional Lawn Care Association of America, Suite C135
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• **CELEBRATE!** PLCAA's Conference and Show is always the lawn care industry's event of the year, but **PLCAA/Las Vegas '89** will be something special — the official 10th Anniversary celebration of the founding of the Professional Lawn Care Association of America. You won't want to miss the exciting 4-day round of special events planned to mark this milestone in lawn care history.

• **EDUCATE!** Three tracks of education will help you "Plan Your Business" into the '90's, with discussions of employment, water, finances, government regulations, and pesticide safety. Ample opportunities will allow for informal information exchange among colleagues.

• **EVALUATE!** The latest in lawn care products and technology await your inspection. Over 160 manufacturers, suppliers and distributors will be on hand, eager to answer your questions and demonstrate the tools you need to keep a competitive edge.

Each morning of the Conference and Show we will present a New Product Expo. Learn what will be state-of-the-art in the 1990s and how your business can profit from new technology and new chemistry.

• **PARTICIPATE!** This 10 year celebration of lawn care comes around only once, so don't miss it! Don't wait to hear about it from your friends, be there to experience for yourself what all the excitement is about. Experience Las Vegas, spectacular showplace of America where the Stars come out to play every night.

Watch your mail in early summer for registration information, or call PLCAA for information 1-800-458-3466, and mark your calendar for a trip to Las Vegas!

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WANT TO BUY OR SELL A GOLF COURSE? Exclusively golf course transactions and appraisals. Ask for our catalog. McKay Golf and Country Club Properties, 15485 N. East Street, Lansing, Michigan 48906. Phone (517)484-7726. TF

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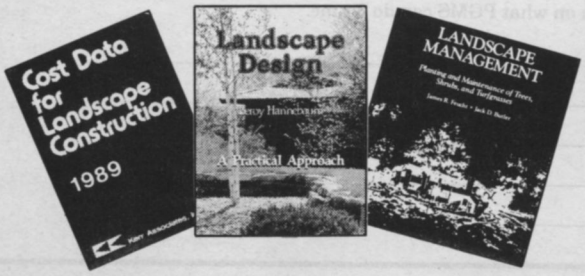

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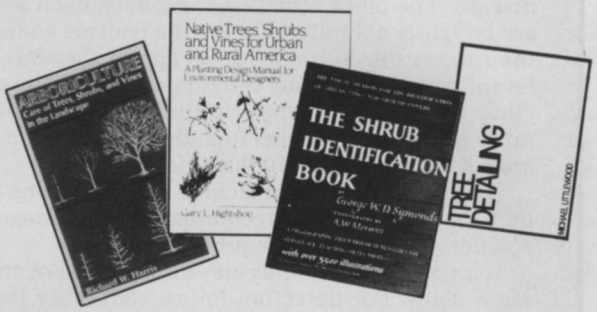

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LM

PROBLEM MANAGEMENT

by **Balakrishna Rao,** Ph.D.

Identifying mildew disease

Problem: *Every year on oak trees we see whitish powdery growth on the lower surface of the leaves. We also see a number of small, black specks present in this area. Is this caused by mites? What can be sprayed to control this? (Ohio)*

Solution: From your description of the symptoms, the problem you are dealing with appears to be caused by a fungus that causes powdery mildew disease. The black structures you have been seeing are probably not mites, but are the fruiting bodies of the fungus that contain fungal spores. Several different powdery mildew fungi attack oak. These include *Sphaerotheca lanestris*, the most troublesome mildew producer. Others include *Erisiphe trina*, *Microsphaeria alni* and *Phyllactinia corylea*.

An application of fungicides like Acti-done PM, Benlate or Karathane is recommended to manage the powdery mildew disease problems.

It is possible that mites may also be present on the same plant. For detecting mites, shake the leaves over some white paper or cloth. If there are many mites, they will fall and begin to crawl on the white surface. Mites have eight legs while insects have six legs. Mites leave a staining mark on the white surface when crushed. Verify this possibility just to be sure.

If the problem is identified to be due to mites, an application of dormant oil during early spring or an application of miticides such as Kelthane in mid-June and again two to three weeks later should help minimize the problem.

Controlling poison ivy

Problem: *We have a major problem with poison ivy plants in some of our clients' properties. What is the best way to control these. Can we use Roundup? (New York)*

Solution: Treatments with amitrol (Amizole, Aminotriazol or Weedazol), a post-emergence herbicide, reportedly provides excellent control of poison ivy. It is a non-selective herbicide designed to be applied onto the foliage of perennial broadleaf weeds like poison ivy. It will be absorbed by the leaves and translocated to the stems and roots. It is very effective against poison ivy. Avoid contacting desirable, non-target plants because it will turn the leaves yellow, white and then brown.

Use amitrol as a spot treatment for perennial weeds like poison ivy in or near nursery crops or landscaping. For best results, treat weeds at full leaf, about four to six feet high, and before blooming.

Check with your county extension agent for clearance to use this product in your area. All registrations for the use of amitrol on food crops, including pastures, have been cancelled. Avoid using it in an area where there is a chance of food or feed contamination. A waiting period of six to eight weeks is required before planting any plant material.

Roundup is also registered for managing poison ivy plants. For managing these apply four to five quarts of Roundup per acre as a broadcast spray or as a 2 percent solution with hand-held equipment. Remember that Roundup will be absorbed through actively growing green leaves. Therefore, thorough coverage is necessary. Repeat applications may be needed for good results. Fall treatments should be made prior to leaves losing green color.

Why power rake?

Problem: *Why power rake, since power raking does little to reduce thatch? (Colorado)*

Solution: You are right: power raking does little, if anything, to reduce thatch. I don't believe that any professional turfgrass manager or lawn care professional would be recommending power raking to reduce thatch, except under certain situations.

Those who believe in the misconception that the clippings can contribute to thatch development may perform this. However, power raking might be useful in removing excess dead blades or plants that are present, often due to infrequent mowing. This can occur if the turf is allowed to grow tall before mowing, which deposits excessively long clippings. In this situation, blades will decompose slower than if they are mowed frequently.

Ideally, turfgrass should be mowed whenever growth is ½ inch taller than the recommended cutting height for a particular cultivar. A good mowing schedule and practice will eliminate the need for removing long clippings.

The areas damaged by insect and disease or abiotic stress factors may also be benefited by power raking to remove the dead or matted blades. **LM**

Balakrishna Rao is Manager of Technical Resources for the Davey Tree Co., Kent, Ohio.

Questions should be mailed to Problem Management, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.

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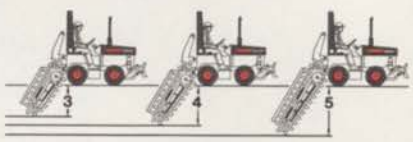

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